NATIONAL ADVISORY COMMITTEE FOR AERONAUTICS

TECHNICAL NOTE 3162

EFFECTS OF SUBSONIC MACH NUMBER ON THE FORCES AND PRESSURE DISTRIBUTIONS ON FOUR NACA 64A-SERIES AIRFOIL SECTIONS AT ANGLES OF ATTACK AS HIGH AS 28°

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SUMMARY

Lift, drag, moment, and pressure-distribution measurements have been made for the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections at high subsonic Mach numbers. The tests were made for angles of attack as high as 28° and for Mach numbers ranging from 0.30 to about 0.93 with corresponding Reynolds numbers varying from approximately 0.9×10^6 to 1.9×10^6.

A comparison of the maximum lift coefficients from NACA TN 2096 for 10-percent-chord-thick NACA 64A-series airfoil sections cambered with $a = 1.0$ and $a = 0.4$ mean lines with those of the present report for the NACA 64A410 airfoil section cambered with the $a = 0.8$ (modified) mean line indicated that the $a = 0.8$ (modified) mean line was superior for providing high maximum lift coefficients throughout the Mach number range, especially for Mach numbers above about 0.6.

As the angle of attack was increased above that for the maximum lift coefficient obtained at about 8° to 10° angle of attack, the symmetrical airfoil sections experienced no serious losses in lift coefficient. In fact, the lift coefficients for the symmetrical airfoil sections and for the NACA 64A406 airfoil section at angles of attack above 24° reached values greater than the respective initial maximum lift coefficients obtained at the lower angles of attack.

A region of slight compression, heretofore undescribed, was established within the local supersonic region on each of the airfoil sections near the leading edge in place of an expected expansion. This leading-edge compression region was formed just downstream of the abrupt

expansion at the leading edge for ranges of Mach number and angle of attack that varied in some degree with airfoil-section thickness ratio and camber. As indicated by the measured pressures on the surface of the airfoil sections, the flow over the leading edge expanded to maximum local Mach numbers from 1.6 to 2.0 before the start of the leading-edge compression region. When the leading-edge compression region was established on the airfoil sections, the lambda shock wave, which usually developed in the flow at high Mach numbers, was not formed on the same surface, leaving only the normal shock wave.

For angles of attack above that for complete separation of the flow over the upper surface of each airfoil section, the pressure coefficients on this surface for a constant Mach number were essentially unaffected by camber of the airfoil section or by a reduction in airfoil-section thickness ratio from 0.10 to 0.06. The corresponding pressure coefficients on the lower surface, however, were increased noticeably by the increase in camber or by the decrease in thickness ratio.

INTRODUCTION

The relative simplicity with which the subsonic aerodynamic characteristics of unswept wings may be calculated from section data employing lifting-line theory (see ref. 1) has been appreciated for many years and, more recently, has been an incentive for establishing a similar procedure suitable for swept wings. One recent effort to determine local section characteristics of sweptback wings from two-dimensional data, reported in reference 2, was limited to low speeds. Similar analyses for high subsonic Mach numbers are restricted by the lack of appropriate two-dimensional data.

The purpose of this report is to present extensive lift, drag, moment, and pressure-distribution data for cambered and uncambered 10- and 6-percent-thick NACA 64A-series airfoil sections for high subsonic Mach numbers. The camber corresponded to a design lift coefficient of 0.4, which is representative for swept-wing applications. An analysis of the force and moment data has been made to provide additional information regarding the behavior of thin airfoils for Mach numbers as high as 0.93 and for angles of attack as high as 28°. Analysis of the pressure-distribution data has been confined largely to the characteristics within the local supersonic regions on the airfoil surfaces. A brief analysis of the pressure-distribution characteristics above the stall, however, has also been made.

NOTATION

a	mean-line designation, fraction of chord from leading edge over which design load is uniform
a_o	section lift-curve slope
c	airfoil chord
c_d	section drag coefficient
c_l	section lift coefficient
$c_{l_{max}}$	initial maximum section lift coefficient attained upon increasing the angle of attack from zero
$c_{m_{c/4}}$	section moment coefficient about quarter-chord point
M	free-stream Mach number
p	local static pressure
p_o	free-stream static pressure
P	local pressure coefficient, $\frac{p - p_o}{q_o}$
q_o	free-stream dynamic pressure
R	Reynolds number
x	distance along chord from leading edge
α_o	section angle of attack

APPARATUS AND TEST METHODS

The present investigation was conducted in the Ames 1- by 3-1/2-foot high-speed wind tunnel, a two-dimensional flow, low turbulence, closed-throat tunnel.

The NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections were employed in the investigation. Profiles of these airfoil sections are

shown in figure 1, and coordinates are given in tables I to IV. The $a = 0.8$ (modified) mean line was used for the cambered airfoil sections in order to maintain the characteristic straight portions of the NACA 64A-series profiles near the trailing edge. (See ref. 3.) In the present report where the mean-line designation is not included with the designation of the cambered airfoils, it is to be understood that the mean line employed was the $a = 0.8$ (modified). Six-inch-chord models were constructed using a steel core covered with a tin-bismuth alloy which, in turn, was contoured to the proper coordinates. The tubes employed in measuring the pressures on the surfaces of the models were embedded in the alloy. The models were mounted so as to span completely the 1-foot width of the tunnel test section and were supported at each end by clamps which were contoured to the model profiles and which were flush with the tunnel side walls. Air leakage at the clamps, which would disturb the two-dimensional flow over the ends of the models, was prevented by tight-fitting rubber gaskets. The models were equipped with from 42 to 47 pressure orifices, approximately 0.010 inch in diameter at the surface, which were in a chordwise plane near the center of the tunnel when the models were mounted for testing. The chordwise locations of the pressure orifices for each model are given in the first columns of tables V to VIII.

Lift, drag, moment, and pressure-distribution measurements were made simultaneously for each of the NACA 64A410, 64A006, and 64A406 airfoil sections at angles of attack ranging from -5° to 28°. Since lift, drag, and moment data for the NACA 64A010 airfoil section at angles of attack as high as 12° are already available in references 4 and 5, only pressure measurements were made for this airfoil section at these angles of attack, but simultaneous measurements of lift, drag, moment, and pressure distribution were made at angles of attack from 14° to 28°. The range of test Mach numbers of the present investigation varied from 0.30 to about 0.93 depending on the airfoil model and the angle of attack. The maximum Mach number at each angle of attack was limited either by the choking speed of the tunnel or by the load capacity of the balances with which the lift and drag forces were measured. The Reynolds number of the investigation varied from about 0.9×10^{6} to about 1.9×10^{6}, as shown in figure 2.

Lift and moment of the models were determined from the pressure reactions on the floor and ceiling of the tunnel test section in a manner similar to that described for the measurement of lift in the appendix of reference 6. Drag was determined from wake surveys made with a movable rake of total-pressure tubes. The pressures on the surfaces of the models were measured by means of a multiple-tube manometer, which was photographed to insure simultaneous measurement of the height of each column of liquid.

CORRECTIONS AND PRECISION OF DATA

The effects of the wind-tunnel jet boundaries on the measured data of this report have been determined by the methods of reference 7. At any Mach number or angle of attack of the present investigation, the corrections to the section angles of attack are less than $\pm 0.1^{\circ}$, and those to the pressure coefficients are less than ± 0.012. These corrections have been neglected. An indication of the magnitude of the corrections which have been applied to the Mach numbers and to the force and moment coefficients is given in the following table, where the primed symbols correspond to the uncorrected data, and the ranges of values given show the variation in the magnitudes of the correction factors among the four airfoil models tested:

M'	$\frac{M}{M'}$	$\frac{c_l}{c_l'}$	$\frac{c_d}{c_d'}$	$\frac{c_{m_{c/4}}}{c_{m'_{c/4}}}$
		$\alpha_o = 0^{\circ}$		
0.30	1.001	0.995 to 0.994	0.998 to 0.997	0.999 to 0.994
.75	1.003 to 1.005	.988 to .986	.994 to .991	.995 to .988
.85	1.006 to 1.015	.977 to .967	.989 to .977	.990 to .952
.90	1.011 to 1.040	.965 to .935	.981 to .948	.981 to .953
		$\alpha_o = 4^{\circ}$		
0.30	1.001	0.994	0.997	0.992
.70	1.003 to 1.004	0.988 to 0.986	0.994 to 0.992	0.984 to 0.920
.80	1.012 to 1.017	.972 to .968	.980 to .976	.972 to .964
.85	1.021 to 1.027	.968 to .955	.971 to .963	.963 to .958
		$\alpha_o = 10^{\circ}$		
0.30	1.002 to 1.006	0.993 to 0.985	0.996 to 0.984	0.986 to 0.981
.60	1.008 to 1.013	.981 to .971	.987 to .978	.974 to .955
.70	1.020 to 1.024	.965 to .958	.971 to .964	.963 to .956
.75	1.025 to 1.030	.961 to .952	.966 to .962	.957 to .952
		$\alpha_o = 20^{\circ}$		
0.30	1.014 to 1.015	0.970 to 0.969	0.973 to 0.972	0.967 to 0.963
.50	1.020 to 1.022	.962 to .960	.965 to .963	.959 to .956
.60	1.028 to 1.031	.950 to .946	.956 to .951	.947 to .939
		$\alpha_o = 28^{\circ}$		
0.30	1.026 to 1.029	0.946 to 0.941	0.949 to 0.944	0.942 to 0.939
.50	1.041 to 1.043	.928 to .926	.931 to .929	.926 to .924

There is some uncertainty concerning the accuracy of the data obtained at the highest test Mach numbers because of the possible influence of incipient choking of the tunnel near the model. Such regions of uncertainty are indicated in the figures presenting lift, drag, and moment coefficients by dashed portions of the curves at the highest Mach numbers.

The error in mounting each airfoil model in the tunnel test section at a given angle of attack was less than ±0.1°, and the setting of other angles of attack relative to this initial attitude could be made within ±0.025°. The maximum errors in the pressure coefficients presented herein are of the order of ±0.01. An analysis of the precision of the lift, drag, and moment coefficients was made for the models of the present investigation, and the over-all uncertainties for the lift and moment coefficients are as follows:

M	c_l error	$c_{m_{c/4}}$ error
0.3	-0.010 to 0.020	-0.010 to 0.011
.7	0 to .008	-.002 to .004
.9	-.001 to .004	-.003 to .003

The uncertainties for the drag coefficients together with the corresponding percentage errors are given in the following table:

M	α_o, deg	c_d error	Percent error
0.3	0	-0.0007 to 0.0011	-5.5 to 8.6
	10	-.0003 to .0015	-1.0 to 4.9
	28	.0117 to .0183	1.5 to 2.4
.7	0	.0002 to .0004	1.5 to 3.1
	10	.0048 to .0080	2.0 to 2.9
.9	0	.0001 to .0016	.4 to 1.7
	2	.0007 to .0023	1.4 to 1.7

The errors in the test Mach numbers and Reynolds numbers are less than ±0.005 and 0.1×10^6, respectively.

RESULTS AND DISCUSSION

FORCE AND MOMENT DATA

Lift Characteristics

The effects of Mach number on the section lift coefficients of the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections at constant section angles of attack are shown in figure 3. Asymmetrys of the data for the uncambered NACA 64A010 and 64A006 airfoil sections are observed in this figure, although that for the latter is only very slight. Such asymmetry, which has already been discussed for the NACA 64A010 airfoil section in reference 5, is believed to be due to a combination of inaccuracies in the airfoil fabrication and in the mounting of the models for the tests in the tunnel.

In general, there are no unusual effects of Mach number evident in figure 3. Abrupt increases in lift coefficient, however, are apparent for some of the angles of attack as the Mach number is increased to the highest values shown (fig. 3(a), $\alpha_o = 10^\circ$ and 22°; fig. 3(c), $\alpha\ = 8^\circ$; and fig. 3(d), $\alpha_o = 10^\circ$). For 8° or 10° angles of attack, these increases were apparently caused by the rearward extension of local supersonic flow over the forward portion of the upper surface, as is confirmed by the pressure distribution data presented later in this report. In figure 4 the section lift coefficients for each airfoil section are presented as a function of section angle of attack with Mach number as a parameter. Maximum section lift coefficients are evident for the lower Mach numbers of this figure at angles of attack of about 8° to 10°. No serious losses in lift coefficient are noted for the symmetrical airfoil sections at higher angles of attack. At the highest angles of attack shown the lift coefficients for these airfoil sections and also for the NACA 64A406 airfoil section attained values greater than the respective initial maximum lift coefficients. Nevertheless, in the present report the initial maximum lift coefficients obtained at angles of attack of about 8° to 10° will be referred to as the maximum lift coefficients.

The effects of Mach number on the maximum section lift coefficients of the airfoil sections of this report are presented in figure 5. The expected advantages of the cambered airfoil sections over the symmetrical with respect to the production of higher maximum lift coefficients are observed in this figure. It is also evident that the symmetrical or cambered 6-percent-thick airfoil section provides greater maximum lift coefficients at Mach numbers above about 0.7 than the corresponding 10-percent-thick airfoil section.

The data of figure 6 are presented in order to show the effect of type of camber on the maximum section lift coefficients of several 10-percent-thick NACA 64A-series airfoil sections. The data for the airfoil section cambered for design lift coefficients of 0.3, 0.6, and 0.9 and employing the $a = 1.0$ and/or $a = 0.4$ mean lines were obtained from reference 5. The values of the maximum lift coefficients for the NACA 64A410 airfoil section relative to those for the airfoil sections with design lift coefficients of 0.3 and 0.6 indicate a superiority of the $a = 0.8$ modified mean line over the $a = 1.0$ mean line for providing greater maximum lift coefficients within the range of Mach numbers shown. The superiority is even more evident for Mach numbers greater than about 0.6 where it is observed that the maximum lift coefficients for the NACA 64A410 airfoil section are approximately the same as those for the airfoil sections cambered for a design lift coefficient of 0.6.

The effects of Mach number on the section lift-curve slopes of the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections at lift coefficients of 0, 0.2, and 0.4 are presented in figure 7. The effect of Mach number on the angle of attack required to maintain a constant section lift coefficient is shown in figure 8. The apparent advantage of the symmetrical airfoil sections at zero lift is observed to diminish as the lift coefficient is increased.

Drag Characteristics

The variation of section drag coefficient with Mach number at constant section angle of attack is presented in figure 9 for the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections. Extremely high values of drag coefficient are evident in each figure for the high angles of attack. Although the values of drag coefficient at these angles of attack are observed to be roughly independent of camber, the higher values are for the 6-percent-thick airfoil sections.

The variations of section drag coefficient with section lift coefficient corresponding to angles of attack up to approximately 12° are shown in figure 10 at constant Mach number. The expected advantage of camber for realizing lower drag coefficients at relatively high lift coefficients is obvious in this figure. The advantage, however, decreases with an increase in Mach number and is realized for a smaller range of lift coefficients as the thickness of the airfoil sections is reduced from 10 to 6 percent.

Moment Characteristics

The variation of section moment coefficient with Mach number at constant section angle of attack is presented in figure 11. In this figure it is apparent that there is no marked change in the section moment coefficient of any of the airfoil sections for changes in angle of attack between about 12° and 28°. In figure 12 the variation of section moment coefficient with section lift coefficient is shown for constant Mach number. The average slopes of the moment curves at low lift coefficients increase with increase in Mach number. The rate of this increase in average slopes appears to be unaffected by airfoil-section thickness ratio, but seems to increase with camber at the higher Mach numbers. This latter was also observed in the data of reference 5.

PRESSURE DISTRIBUTIONS

The extensive pressure-distribution data obtained in the present investigation for the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections have been reduced to coefficient form and are presented in tables V to VIII, respectively, for various angles of attack from -5° to 28° and for Mach numbers from 0.30 to as high as 0.93. For discussion purposes the pressure coefficients at Mach numbers selected to show the important trends have been plotted for each airfoil section as a function of the chordwise location of the pressure orifices and are presented in figures 13 to 16. The local Mach number corresponding to a given pressure coefficient, P, and free-stream Mach number, M, may be determined from figure 17, in which the variation of pressure coefficient with Mach number for constant local Mach number is shown, based on isentropic relations.

Characteristics Within the Local Supersonic Regions

NACA 64A010 airfoil section.- Representative pressure distributions for the NACA 64A010 airfoil section at low angles of attack (-1.8° to 2.2°) are shown in figures 13(a) to 13(e). Evidence of broad local supersonic regions on the airfoil surface appears at a Mach number of about 0.81. These supersonic regions, which originate near the leading edge of the airfoil section, terminate at the abrupt increases in pressure (compressions) associated with the shock waves. The abrupt increases are located near the midchord position for a Mach number of about 0.81 and move downstream to the trailing edge as the Mach number is increased further. The compressions at the downstream boundary of the supersonic regions are

made up of two characteristic parts, an initial slight pressure increase followed by an abrupt increase. This type of pressure recovery is associated with lambda shock waves. (See refs. 8 to 10.) At a Mach number of about 0.93 the pressure data indicate that the local flow at the surface leaves the trailing edge at a supersonic Mach number. Thus, the supersonic region is not terminated on the airfoil section at this free-stream Mach number. Confirmation of the foregoing characteristics exhibited by the pressure data is given in schlieren photographs of the flow over the NACA 64A010 airfoil section, obtained during the investigation reported in references 4 and 5 and which are presented in figure 18(a) for an angle of attack of 1°. Lambda-shaped shock waves are evident in each photograph at the locations corresponding to the compressions evident in the pressure data. For a Mach number of 0.92 it is apparent that the normal legs of the lambda waves on both upper and lower surfaces have reached the trailing edge of the airfoil section. This accounts for the local supersonic Mach numbers at the trailing edge for about this free-stream Mach number.

At angles of attack from 4.2° to 10.2° (figs. 13(f) to 13(i)), abrupt pressure increases of the type associated with normal shock waves appear in the pressure data at low supercritical Mach numbers. In addition, an extensive region of slight compression originates just downstream of the start of the local supersonic region which should not be confused with the similar compression associated with the oblique leg of a lambda wave. The former compression, which is discussed in detail in the next paragraph, is distinguished from the latter in the following points: (a) this type of compression originates near the leading edge; (b) the location of the origin is not appreciably affected by Mach number; and (c) this compression is not related to the normal shock wave but appears rather to be associated with the abrupt expansion region at the leading edge of the airfoil section. Furthermore, it should be realized that the two types of mild compression do not appear simultaneously on the same surface of the airfoil section. In other words, when the compression that forms near the leading edge is fully developed, no lambda shock waves form downstream in the flow on that surface, but only normal shock waves. This will be evident in some of the schlieren photographs which are presented later in this report. In figures 13(f) to 13(i) it is observed that the pressure increases associated with the shock waves are more widespread and less abrupt than those noted for the lower angles of attack. Such a change in the character of the increases in pressure apparently results from the more pronounced boundary-layer separation which exists at the higher angles of attack and Mach numbers. The extent of separation and the nature of the shock waves at the higher Mach numbers on the NACA 64A010 airfoil section at angles of attack of 6°, 8°, and 10° are shown in the schlieren photographs of figures 18(d) to 18(f). It is noted in the photographs for the higher Mach numbers and angles of attack that the shock waves, although similar in shape to the lambda shock waves

noted at the low angles of attack, differ from these previously discussed in that the oblique legs of the waves appear markedly stronger.

In the pressure data for angles of attack from 4.2° to 8.2°, a mild pressure rise is observed on the upper surface that originates near the leading edge and extends downstream to the abrupt pressure increase associated with the normal shock wave. This slight compression near the leading edge (hereinafter designated as the leading-edge compression) exists in the upstream portion of the local supersonic Mach number region where an expansion would be expected, indicating a change in the nature of the local flow over the upper surface in this region. To show the features of this leading-edge compression region in more detail, pressure coefficients on the upper surface for an angle of attack of 6.2°, given in table V, have been plotted for several Mach numbers above 0.61 in figure 19. It is noted in this figure that a slight pressure increase near the leading edge is just beginning for a Mach number of 0.64, and as the Mach number is increased the compression region spreads downstream. Throughout the range of Mach numbers, however, the origin of the compression remains essentially fixed between the 2.5- and the 5-percent chordwise stations. Although the region is extensive and well developed for Mach numbers of 0.71 and 0.77, the compression appears greatly diminished for Mach numbers of 0.82 and 0.85. At these higher Mach numbers, pressure increases of the type associated with lambda shock waves are apparent. To indicate the effect of free-stream Mach number on the magnitude of the leading-edge compression, differences in local Mach numbers associated with the peak pressure at the start of this region and the pressure at approximately the 0.10 chordwise station have been determined for several free-stream Mach numbers, using figure 17. These differences in local Mach numbers ΔM_l and the maximum local Mach numbers corresponding to the peak pressures near the leading edge $M_{l_{max}}$ are given in the following table for angles of attack of 4.2°, 6.2°, and 8.2°:

M	$\alpha_o = 4.2°$		$\alpha_o = 6.2°$		$\alpha_o = 8.2°$	
	ΔM_l	$M_{l_{max}}$	ΔM_l	$M_{l_{max}}$	ΔM_l	$M_{l_{max}}$
0.63 to 0.64	- - -	1.24	-0.16	1.60	-0.19	1.40
.66 to .67	-0.34	1.35	-.14	1.61	-.17	1.44
.71	-.10	1.44	-.10	1.58	-.12	1.41
.74	-.05	1.43	-.09	1.58	-.10	1.38
.76 to .77	-.06	1.40	-.06	1.56	-.08	1.52
.79 to .80	-.05	1.37	-.05	1.51	-.06	1.60

As the free-stream Mach number is increased, a reduction of the differences in local Mach numbers is observed for each angle of attack in the

table, indicating a corresponding reduction in the strength of the leading-edge compression. It is also observed that the compression is associated with high values of maximum local Mach numbers, especially for the 6.2° and 8.2° angles of attack. These high values of local Mach number (up to 1.61) are indicative of a strong expansion region just upstream of the leading-edge compression region.

Substantiating evidence that a compression region existed in the flow over the NACA 64A010 airfoil section near the leading edge for conditions corresponding to the data of figure 19 is given in the schlieren photographs of figure 18(d). (The fixed bulbous shape which appears on the forward portion of the upper surface in some of the schlieren photographs of this report is due to a chipped window in the wind-tunnel side wall.) In the photographs of the present report, a light area is indicative of a compression region, and a dark area is indicative of an expansion region.

There is little evidence of shock-induced compression on the upper surface of the airfoil section at angles of attack from 12.2° to 18.2°, figures 13(j) to 13(m), and none at the higher angles of attack. The extensive separation of the flow over the upper surface at these angles of attack apparently obscured any effects of existing shock waves.

NACA 64A410 airfoil section.- An examination of the pressure data for the NACA 64A410 airfoil section which are presented in figure 14 and table VI reveals that the characteristics of the pressure distributions within the local supersonic regions on this airfoil section are generally the same as those for the NACA 64A010 airfoil section. The leading-edge compression region was formed on the upper surface at approximately the same angles of attack as for the NACA 64A010 airfoil section, but because of the camber, a compression region was also formed on the lower surface for angles of attack from -5° to 0°. An inspection of the differences in local Mach numbers in this region has indicated that the leading-edge compression on the NACA 64A410 airfoil section was stronger on the lower surface and weaker on the upper surface than the corresponding compression on the symmetrical airfoil section. Furthermore, the maximum local Mach numbers associated with the peak pressures near the leading edge are greater on the lower surface and less on the upper surface for the cambered airfoil section. Local Mach numbers as high as 1.7 to 1.8 were attained on the lower surface of the cambered airfoil section at angles of attack of -5° and -4°.

Schlieren photographs for the NACA 64A310, a = 1.0, airfoil section (differing from the NACA 64A410 airfoil section in amount and type of camber) are presented in figure 20 to corroborate the foregoing remarks concerning the characteristics of the pressure variations within the

local supersonic regions on the NACA 64A410 airfoil section. These photographs were made during the investigation reported in reference 5. It is observed in figure 20 for an angle of attack of -4° that a relatively strong leading-edge compression region was formed on the lower surface at Mach numbers above 0.71, and that lambda waves were established on the upper surface at Mach numbers greater than about 0.81. The characteristics of the leading-edge compression region on a cambered 10-percent-thick airfoil section, as revealed in the photographs of figure 20, are much the same as those for the NACA 64A010 airfoil section.

It is noteworthy that evidences of a leading-edge compression region are apparent in the pressure-distribution data of reference 11 for sections of a 45° sweptback wing of aspect ratio 3 employing the NACA 64A410 airfoil section. The compression region appeared at the outboard stations at subsonic free-stream Mach numbers of 0.86 and above for angles of attack from about 7° to 10°, and was established immediately downstream of a strong expansion region along the leading edge wherein the local Mach numbers attained values as high as 1.9.

NACA 64A006 airfoil section.- The pressure coefficients for the NACA 64A006 airfoil section are given in figure 15 and table VII. A comparison of the coefficients for angles of attack of $\pm 2^{\circ}$ and also for $\pm 1^{\circ}$ at given chordwise stations, particularly near the leading edge, indicates that the model of the NACA 64A006 airfoil section was not perfectly symmetrical. Measurements have indicated that the asymmetry is due to small construction inaccuracies which, for this model, were larger than usual. The ordinates around the leading edge and on the lower surface near the leading edge were very close to those specified. On the upper surface, however, the ordinates between the 0.5- and about the 10-percent-chord positions were greater than the specified ordinates, the maximum difference being approximately 0.1-percent chord. It should be recalled, however, that the asymmetry of the lift coefficient data, shown in figure 3(c), is very small and is less than that observed for the NACA 64A010 airfoil section in figure 3(a). Irregular values of certain pressure coefficients near the leading edge, which probably resulted from orifice errors, are also observed at angles of attack of -1°, 0°, and 1° and at the trailing edge at angles of attack from -1° to 10° for some of the Mach numbers. The curves have been faired through these values.

A comparison of the nature of the pressure distributions within the local supersonic regions on the NACA 64A006 airfoil section with that previously discussed for the NACA 64A010 airfoil section indicates that the reduction in thickness changes some of the characteristics of the pressure distributions and delays their appearance to higher Mach numbers. In particular, the pressure increase resulting from the oblique leg of the lambda shock wave is not apparent in the data for the 6-percent-thick airfoil section at the lower angles of attack. The leading-edge

compression region is formed at a lower angle of attack than for the 10-percent-thick airfoil section. At angles of attack of 0° or 1°, pressure increases due to shock waves do not appear in the data for Mach numbers less than about 0.87.

In the data of figure 15 it appears that a leading-edge compression region was formed on the lower surface at angles of attack of -2° and -1°, figures 15(a) and 15(b), but not on the upper surface at 1° and 2°, figures 15(d) and 15(e). Although this result is explained by the previously discussed asymmetry of the model, it does not provide evidence that such a region would be formed at these angles of attack on a perfectly symmetrical airfoil section. Since the compression region was not established on the NACA 64A010 airfoil section at angles of attack less than 4°, however, it appears that such a region forms at a lower angle of attack as the thickness ratio is reduced.

The characteristics of the leading-edge compression region on the NACA 64A006 airfoil section at angles of attack from 4° to 8°, as revealed by an examination of the local Mach numbers in this region, are much the same as those for the corresponding region on the NACA 64A010 airfoil section. The compression, however, was indicated to be greater for the thinner airfoil section. Unusually high values of maximum local Mach number corresponding to the peak pressures near the leading edge are also indicated for the NACA 64A006 airfoil section, disclosing the existence of a strong expansion at the leading edge of this airfoil section. A maximum value of 1.88 was attained at 6° and 8° angles of attack and for free-stream Mach numbers of about 0.75 and 0.80, respectively. This value is greater than the maximum local Mach numbers noted for either the cambered or symmetrical 10-percent-thick airfoil sections.

<u>NACA 64A406 airfoil section.</u>- Examination of the characteristics of the pressure variations within the local supersonic regions, as given by the data of figure 16 and table VIII for the NACA 64A406 airfoil section, indicates that the effects of camber on such characteristics for a 6-percent-thick airfoil section are generally the same as that previously noted for the 10-percent-thick airfoil section. Although the slight pressure increases associated with the oblique legs of lambda waves were not apparent in the pressure data for the NACA 64A006 airfoil section at the lower angles of attack, such increases in pressure are evident in the data for the upper surface of the NACA 64A406 airfoil section. From this it is inferred that the oblique waves on the upper surface of the cambered 6-percent-thick airfoil section were stronger than those on the uncambered airfoil section, which would be expected because of the differences in curvature.

The characteristics of the leading-edge region of compression on the upper surface of the NACA 64A406 airfoil section are essentially the same

as those for the compression regions of the previously discussed airfoil sections. For the lower surface of the NACA 64A406 airfoil section, however, the characteristics of the compression region are significantly different. The compression on this surface appears very strong in comparison with that on the upper surface or with those for the other airfoil sections of this report. It is also indicated that this compression did not significantly diminish in strength as the free-stream Mach number was increased. Extremely high values of maximum local Mach number corresponding to the peak pressures at the leading edge were also realized on the lower surface at negative angles of attack. A maximum local Mach number of 2.03 is indicated at -5° angle of attack for a free-stream Mach number of about 0.85. This high value is much greater than that known by the author to exist on any other airfoil section tested in a subsonic free stream.

A comparison of local Mach numbers for several airfoil sections, including others than those of this report, has revealed that the strongest leading-edge compression region is associated with the airfoil section having the highest local Mach numbers near the leading edge or having the least local radius of curvature of the profile very near the leading edge, airfoil sections with sharp leading edges excepted.

Characteristics Above the Stall

In the pressure-distribution data of figures 13 to 16 for the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections, the types of stall observed at the lower Mach numbers conform to the three representative types of low-speed stall discussed in reference 12. The stalling characteristics for the NACA 64A010 airfoil section, as determined from figure 13, are also in harmony with the corresponding low-speed pressure-distribution data of reference 13 for the same airfoil section. Such agreement between the nature of the stall discussed in these references and that observed in the pressure data of the present report is noteworthy, inasmuch as the data of references 12 and 13 correspond to much higher Reynolds numbers (about 4×10^6 to 5.8×10^6) than those for the present data. The effect of the camber on the flow over the 10-percent-thick airfoil section, determined from figures 13 and 14, is reflected in a change in the type of stall to one normally associated with a thicker airfoil section. From the data of figures 15 and 16, however, it does not appear that the camber for the 6-percent-thick section altered the type of stall.

The stalling angles for the airfoil sections, which vary from approximately 8° to 10° at the low Mach numbers, are more readily determined from the lift coefficient data of figure 4 than from the pressure coefficient data of figures 13 to 16. For angles immediately above those

for stall, the pressure data corresponding to each airfoil section indicate the existence of local regions of separation which increase in chordwise extent as the angle of attack is increased. (Regions of separated flow are usually recognized at high angles of attack by the relatively constant pressures which are characteristic of such regions.) The extent and location of the separated regions are also affected by the airfoil-section thickness ratio and by camber. At an angle of attack somewhat above that for stall, the separated region has spread sufficiently to cover the entire upper surface. This angle for complete separation on the upper surface decreases with a reduction in airfoil-section thickness ratio and increases with an increase in camber, varying from about 24° for the NACA 64A410 airfoil section to about 12° for the NACA 64A006 airfoil section.

On the upper surface of the airfoil sections at angles of attack above those for which the flow is completely separated on this surface, the pressure coefficients for a given Mach number are more or less constant between the values -0.5 and -0.9 and are essentially independent of airfoil-section thickness ratio and camber. The pressure coefficients are scarcely affected by angle of attack up to about 22°, but above this angle the coefficients generally decrease slightly for an increase in angle of attack. The effect of Mach number is nearly always to decrease the values of the pressure coefficients on the upper surface.

In figures 13 to 16 it is observed that the pressure coefficients on the lower surface of each airfoil section at angles of attack above those for the stall are, for the most part, affected only a small amount by increases in angle of attack or Mach number. At angles of attack greater than about 16°, the effects of angle of attack and Mach number are such as to increase generally the pressure coefficients slightly for the symmetrical airfoil sections, whereas the pressure coefficients appear to vary appreciably only with Mach number for the cambered airfoil sections. It is also noted that a substantial increase in the pressure coefficients on the lower surface downstream of the stagnation point is produced by the camber or by the reduction in airfoil-section thickness ratio from 0.10 to 0.06.

From the foregoing, it is apparent that the pressure data for the airfoil sections of the present report corresponding to angles of attack above those for complete separation over the upper surface may be employed to predict the pressure distributions for other airfoil sections at comparable angles of attack. The thickness ratios, cambers, and thickness distributions for these other airfoil sections, however, should probably not be too different from those of the airfoil sections of this report. Predicted upper-surface pressure coefficients may be obtained directly from the data of figures 13 to 16 or tables V to VIII for the appropriate angle of attack and Mach number. For the lower surface,

however, the pressure coefficients will need to be interpolated for the appropriate thickness ratio and camber.

CONCLUSIONS

The results of the investigation of the NACA 64A010, 64A410, 64A006, and 64A406 airfoil sections at angles of attack as high as 28° and for Mach numbers ranging from 0.3 to about 0.93, with corresponding Reynolds numbers varying from approximately 0.9×10^6 to 1.9×10^6, indicate the following:

1. No marked losses in lift coefficient were experienced by the symmetrical airfoil sections as the angle of attack was increased above that for the maximum lift coefficient obtained at angles of attack of about 8° to 10°. Furthermore, the lift coefficients of the NACA 64A406 airfoil section and of the symmetrical airfoil sections at angles of attack above 24° attained values greater than the corresponding initial maximum lift coefficients obtained at the lower angles of attack.

2. A comparison of the maximum lift coefficients of 10-percent-chord-thick NACA 64A-series airfoil sections cambered with $a = 1.0$ and $a = 0.4$ mean lines with those for the NACA 64A410 airfoil section cambered with the $a = 0.8$ (modified) mean line indicated that the $a = 0.8$ (modified) mean line was superior for providing high maximum lift coefficients throughout the Mach number range, and especially for Mach numbers above about 0.6.

3. A previously undescribed region of mild compression, rather than an expansion, was formed in the local supersonic Mach number region near the leading edge of each of the airfoil sections within ranges of angle of attack and Mach number that varied somewhat with camber and airfoil-thickness ratio. This leading-edge compression region was established just downstream of the strong expansion at the leading edge. The flow over the leading edge expanded to local Mach numbers from 1.6 to 2.0, based on the measured pressures on the surface. When a leading-edge compression region was formed on a surface, the lambda shock wave, which usually developed in the flow at high Mach numbers, was not established on this surface, leaving only the normal shock wave.

4. For angles of attack above that for complete separation of the flow over the upper surface, the pressure coefficients on this surface did not vary appreciably with the change in camber or with the reduction in airfoil-section thickness ratio from 0.10 to 0.06 at constant Mach

number. The corresponding pressure coefficients on the lower surface, however, were increased noticeably by the increase in camber or by the decrease in thickness ratio.

Ames Aeronautical Laboratory
National Advisory Committee for Aeronautics
Moffett Field, Calif., Nov. 6, 1953

REFERENCES

1. Sivells, James C., and Neely, Robert H.: Method for Calculating Wing Characteristics by Lifting-Line Theory Using Nonlinear Section Lift Data. NACA Rep. 865, 1947.

2. Hunton, Lynn W.: Effects of Finite Span on the Section Characteristics of Two 45° Sweptback Wings of Aspect Ratio 6. NACA TN 3008, 1953. (Supersedes NACA RM A52A10)

3. Loftin, Laurence K., Jr.: Theoretical and Experimental Data for a Number of NACA 6A-Series Airfoil Sections. NACA Rep. 903, 1948.

4. Hemenover, Albert D.: Tests of the NACA 64-010 and 64A010 Airfoil Sections at High Subsonic Mach Numbers. NACA RM A9E31, 1949.

5. Summers, James L., and Treon, Stuart, L.: The Effects of Amount and Type of Camber on the Variation With Mach Number of the Aerodynamic Characteristics of a 10-Percent-Thick NACA 64A-Series Airfoil Section. NACA TN 2096, 1950.

6. Abbott, Ira H., von Doenhoff, Albert E., and Stivers, Louis S., Jr.: Summary of Airfoil Data. NACA Rep. 824, 1945.

7. Allen, H. Julian, and Vincenti, Walter G.: Wall Interference in a Two-Dimensional-Flow Wind Tunnel, With Consideration of the Effect of Compressibility. NACA Rep. 782, 1944.

8. Liepmann, Hans Wolfgang: The Interaction Between Boundary Layer and Shock Waves in Transonic Flow. Jour. Aero. Sci., vol. 13, no. 12, pp. 623-637, Dec. 1946.

9. Ackeret, J., Feldmann, F., and Rott, N.: Investigations of Compression Shocks and Boundary Layers in Gases Moving at High Speed. NACA TM 1113, 1947.

10. Allen, H. Julian, Heaslet, Max. A., and Nitzberg, Gerald E.: The Interaction of Boundary Layer and Compression Shock and Its Effect Upon Airfoil Pressure Distributions. NACA RM A7A02, 1947.

11. Boltz, Frederick, W., and Kolbe, Carl D.: The Forces and Pressure Distribution at Subsonic Speeds on a Cambered and Twisted Wing Having 45° of Sweepback, an Aspect Ratio of 3, and a Taper Ratio of 0.5. NACA RM A52D22, 1952.

12. McCullough, George B., and Gault, Donald E.: Examples of Three Representative Types of Airfoil-Section Stall at Low Speed. NACA TN 2502, 1951.

13. Peterson, Robert F.: The Boundary-Layer and Stalling Characteristics of the NACA 64A010 Airfoil Section. NACA TN 2235, 1950.

TABLE I.- COORDINATES OF THE NACA 64A010 AIRFOIL SECTION

[Coordinates given in percent of airfoil chord]

Upper surface		Lower surface	
Station	Ordinate	Station	Ordinate
0	0	0	0
.5	.804	.5	-.804
.75	.969	.75	-.969
1.25	1.225	1.25	-1.225
2.5	1.688	2.5	-1.688
5.0	2.327	5.0	-2.327
7.5	2.805	7.5	-2.805
10	3.199	10	-3.199
15	3.813	15	-3.813
20	4.272	20	-4.272
25	4.606	25	-4.606
30	4.837	30	-4.837
35	4.968	35	-4.968
40	4.995	40	-4.995
45	4.894	45	-4.894
50	4.684	50	-4.684
55	4.388	55	-4.388
60	4.021	60	-4.021
65	3.597	65	-3.597
70	3.127	70	-3.127
75	2.623	75	-2.623
80	2.103	80	-2.103
85	1.582	85	-1.582
90	1.062	90	-1.062
95	.541	95	-.541
100	.021	100	-.021

L.E. radius: 0.687 percent chord
T.E. radius: 0.023 percent chord

TABLE II.- COORDINATES OF THE NACA 64A410 AIRFOIL SECTION

[Coordinates given in percent of airfoil chord]

Upper surface		Lower surface	
Station	Ordinate	Station	Ordinate
0	0	0	0
.350	.902	.650	-.678
.582	1.112	.918	-.796
1.059	1.451	1.441	-.969
2.276	2.095	2.724	-1.251
4.749	3.034	5.251	-1.592
7.239	3.766	7.761	-1.820
9.737	4.380	10.263	-1.996
14.748	5.366	15.252	-2.244
19.770	6.126	20.230	-2.406
24.800	6.705	25.200	-2.499
29.834	7.131	30.166	-2.537
34.871	7.414	35.129	-2.518
39.910	7.552	40.090	-2.436
44.950	7.522	45.050	-2.266
49.989	7.344	50.011	-2.024
55.025	7.040	54.975	-1.736
60.057	6.624	59.943	-1.418
65.085	6.106	64.915	-1.086
70.108	5.490	69.892	-.760
75.126	4.780	74.874	-.460
80.151	3.967	79.849	-.229
85.148	3.018	84.852	-.132
90.104	2.038	89.896	-.076
95.053	1.028	94.947	-.048
100.000	.021	100.000	-.021

L.E. radius: 0.687 percent chord
T.E. radius: 0.023 percent chord
Slope of radius through L.E.: 0.190

TABLE III.- COORDINATES OF THE NACA 64A006 AIRFOIL SECTION

[Coordinates given in percent of airfoil chord]

Upper surface		Lower surface	
Station	Ordinate	Station	Ordinate
0	0	0	0
.5	.485	.5	-.485
.75	.585	.75	-.585
1.25	.739	1.25	-.739
2.5	1.016	2.5	-1.016
5.0	1.399	5.0	-1.399
7.5	1.684	7.5	-1.684
10	1.919	10	-1.919
15	2.283	15	-2.283
20	2.557	20	-2.557
25	2.757	25	-2.757
30	2.896	30	-2.896
35	2.977	35	-2.977
40	2.999	40	-2.999
45	2.945	45	-2.945
50	2.825	50	-2.825
55	2.653	55	-2.653
60	2.438	60	-2.438
65	2.188	65	-2.188
70	1.907	70	-1.907
75	1.602	75	-1.602
80	1.285	80	-1.285
85	.967	85	-.967
90	.649	90	-.649
95	.331	95	-.331
100	.013	100	-.013

L.E. radius: 0.246 percent chord
T.E. radius: 0.014 percent chord

TABLE IV.- COORDINATES OF THE NACA 64A406 AIRFOIL SECTION

[Coordinates given in percent of airfoil chord]

Upper surface		Lower surface	
Station	Ordinate	Station	Ordinate
0	0	0	0
.409	.586	.591	-.364
.649	.734	.851	-.418
1.135	.971	1.365	-.489
2.365	1.429	2.635	-.585
4.849	2.112	5.151	-.670
7.343	2.650	7.657	-.704
9.842	3.104	10.158	-.720
14.849	3.839	15.151	-.717
19.863	4.413	20.137	-.693
24.880	4.857	25.120	-.651
29.900	5.191	30.100	-.597
34.923	5.424	35.077	-.528
39.946	5.557	40.054	-.441
44.970	5.573	45.030	-.317
49.993	5.485	50.007	-.165
55.015	5.305	54.985	-.001
60.034	5.041	59.966	.165
65.052	4.697	64.948	.323
70.066	4.271	69.934	.459
75.077	3.760	74.923	.560
80.092	3.151	79.908	.587
85.090	2.406	84.910	.480
90.063	1.627	89.937	.335
95.032	.819	94.968	.161
100.000	.013	100.000	-.013

L.E. radius: 0.246 percent chord
T.E. radius: 0.014 percent chord
Slope of radius through L.E.: 0.190

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION

(a) $\alpha_o = -1.8^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.90	0.92
0	0.76	0.77	0.82	0.84	0.88	0.89	0.90	0.93	0.94	0.97	1.00	1.03	1.07	1.11	1.16	1.19	1.21
.005	.78	.81	.83	.84	.86	.88	.89	.90	.90	.90	.91	.91	.90	.88	.84	.82	.83
.029	.19	.19	.21	.20	.23	.26	.25	.27	.26	.27	.29	.29	.27	.25	.22	.20	.22
.051	.10	.10	.11	.12	.13	.14	.13	.14	.14	.14	.16	.16	.15	.13	.11	.10	.12
.076	.04	.04	.04	.05	.05	.08	.08	.08	.08	.09	.10	.10	.09	.08	.05	.05	.07
.101	-.01	-.02	-.02	-.01	-.01	.02	.01	.02	.01	.01	.02	.02	.01	0	-.03	-.02	0
.151	-.09	-.08	-.09	-.09	-.09	-.07	-.08	-.07	-.08	-.08	-.07	-.07	-.09	-.10	-.13	-.13	-.10
.199	-.12	-.13	-.14	-.14	-.15	-.12	-.14	-.14	-.15	-.15	-.15	-.15	-.17	-.19	-.22	-.22	-.18
.249	-.16	-.17	-.18	-.18	-.19	-.17	-.19	-.18	-.19	-.20	-.20	-.21	-.23	-.26	-.30	-.29	-.26
.301	-.18	-.19	-.20	-.20	-.22	-.20	-.22	-.21	-.23	-.24	-.24	-.26	-.28	-.33	-.38	-.38	-.34
.349	-.18	-.20	-.21	-.21	-.22	-.20	-.23	-.22	-.24	-.25	-.25	-.27	-.30	-.35	-.43	-.44	-.40
.400	-.19	-.20	-.22	-.22	-.23	-.22	-.23	-.23	-.25	-.26	-.26	-.28	-.32	-.37	-.46	-.47	-.44
.499	-.18	-.20	-.20	-.21	-.22	-.21	-.22	-.22	-.24	-.25	-.24	-.27	-.30	-.36	-.54	-.60	-.57
.549	-.15	-.16	-.17	-.18	-.19	-.17	-.19	-.18	-.20	-.21	-.21	-.22	-.25	-.31	-.49	-.63	-.61
.598	-.12	-.14	-.15	-.15	-.16	-.14	-.16	-.15	-.17	-.17	-.17	-.19	-.22	-.28	-.47	-.63	-.63
.649	-.10	-.11	-.12	-.12	-.13	-.11	-.13	-.12	-.14	-.15	-.15	-.16	-.18	-.16	-.39	-.61	-.65
.701	-.07	-.08	-.09	-.09	-.09	-.07	-.08	-.06	-.07	-.06	-.05	-.04	-.04	-.05	-.09	-.59	-.65
.751	-.05	-.04	-.03	-.02	-.02	0	-.01	0	-.01	-.01	0	0	-.01	-.02	-.02	-.54	-.63
.802	0	.01	.01	.01	.01	.03	.02	.02	.02	.02	.03	.03	.02	.01	0	-.40	-.61
.849	.04	.03	.03	.03	.04	.05	.04	.05	.05	.05	.06	.06	.05	.04	.02	-.25	-.60
.951	.11	.10	.11	.11	.12	.15	.14	.15	.15	.15	.17	.17	.16	.13	.09	.03	-.49
1.000	.17	.17	.18	.19	.20	.22	.21	.23	.22	.23	.24	.25	.23	.19	.11	.04	-.38

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.90	0.92
0.005	-0.39	-0.41	-0.39	-0.38	-0.35	-0.31	-0.30	-0.25	-0.22	-0.16	-0.10	-0.03	0.05	0.13	0.26	0.36	0.42
.014	-.71	-.76	-.79	-.80	-.82	-.82	-.84	-.82	-.82	-.77	-.71	-.63	-.54	-.41	-.29	-.17	-.09
.049	-.51	-.54	-.57	-.58	-.61	-.60	-.63	-.63	-.66	-.67	-.67	-.66	-.60	-.42	-.36	-.26	-.19
.073	-.47	-.51	-.54	-.55	-.58	-.57	-.60	-.61	-.64	-.65	-.65	-.62	-.57	-.49	-.40	-.31	-.25
.098	-.46	-.49	-.52	-.53	-.56	-.56	-.59	-.60	-.64	-.66	-.67	-.65	-.60	-.53	-.45	-.36	-.30
.152	-.43	-.46	-.49	-.51	-.54	-.53	-.57	-.58	-.62	-.66	-.71	-.72	-.68	-.61	-.53	-.45	-.38
.251	-.41	-.44	-.47	-.49	-.51	-.51	-.54	-.56	-.60	-.64	-.68	-.79	-.77	-.71	-.64	-.56	-.49
.300	-.41	-.44	-.47	-.49	-.52	-.51	-.54	-.56	-.60	-.65	-.69	-.82	-.82	-.76	-.69	-.61	-.54
.351	-.40	-.43	-.45	-.47	-.50	-.49	-.52	-.54	-.58	-.62	-.68	-.85	-.88	-.83	-.76	-.68	-.61
.403	-.37	-.39	-.42	-.43	-.46	-.45	-.48	-.49	-.53	-.57	-.63	-.79	-.86	-.85	-.80	-.72	-.66
.449	-.35	-.38	-.40	-.41	-.44	-.43	-.46	-.46	-.50	-.53	-.56	-.77	-.82	-.81	-.80	-.75	-.70
.500	-.32	-.34	-.36	-.37	-.39	-.37	-.40	-.41	-.43	-.44	-.42	-.66	-.82	-.79	-.77	-.74	-.75
.549	-.29	-.30	-.31	-.31	-.32	-.31	-.33	-.32	-.34	-.34	-.33	-.28	-.78	-.79	-.76	-.72	-.78
.602	-.22	-.22	-.24	-.24	-.25	-.23	-.25	-.25	-.26	-.26	-.25	-.19	-.42	-.68	-.74	-.71	-.79
.649	-.16	-.18	-.19	-.19	-.20	-.18	-.20	-.19	-.20	-.20	-.18	-.15	-.20	-.45	-.59	-.67	-.78
.701	-.12	-.13	-.14	-.14	-.15	-.13	-.14	-.13	-.14	-.14	-.13	-.10	-.09	-.28	----	----	----
.751	-.08	-.09	-.10	-.10	-.10	-.08	-.09	-.09	-.08	-.09	-.07	-.06	-.03	-.16	-.30	-.36	-.76
.801	-.05	-.05	-.05	-.05	-.05	-.03	-.04	-.03	-.04	-.03	-.02	-.01	.02	-.05	----	----	----
.851	----	----	----	----	----	-.01	-.01	0	0	.01	0	.02	.03	.02	-.09	-.17	-.62
.951	.09	.09	.10	.11	.11	.12	.12	.13	.13	.14	.15	.15	.16	.14	.07	-.01	-.43

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TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA $64A010$ AIRFOIL SECTION - Continued

(b) $\alpha_o = -0.8^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.70	0.73	0.76	0.79	0.81	0.84	0.87	0.90	0.93
0	0.93	0.99	1.02	1.04	1.06	1.07	1.08	1.09	1.10	1.12	1.13	1.14	1.16	1.17	1.19	1.21	1.22
.005	.55	.60	.62	.63	.66	.65	.67	.68	.69	.71	.72	.72	.72	.73	.73	.71	.73
.029	-.01	.02	.01	.02	.03	.03	.03	.05	.05	.06	.07	.08	.07	.09	.09	.09	.12
.051	-.05	-.03	-.04	-.02	-.03	-.03	-.04	-.02	-.04	-.03	-.03	-.01	-.02	-.01	0	0	.04
.076	-.09	-.08	-.09	-.08	-.09	-.09	-.09	-.07	-.08	-.07	-.07	-.06	-.06	-.05	-.04	-.04	0
.101	-.13	-.12	-.14	-.13	-.14	-.14	-.15	-.13	-.14	-.13	-.13	-.12	-.13	-.12	-.11	-.11	-.06
.151	-.18	-.17	-.19	-.19	-.20	-.20	-.21	-.19	-.21	-.20	-.21	-.21	-.22	-.22	-.21	-.20	-.16
.199	-.21	-.21	-.23	-.23	-.24	-.24	-.26	-.24	-.26	-.26	-.27	-.27	-.30	-.30	-.29	-.28	-.23
.249	-.23	-.23	-.26	-.25	-.27	-.27	-.29	-.27	-.30	-.30	-.32	-.32	-.36	-.37	-.36	-.36	-.31
.301	-.25	-.25	-.28	-.28	-.29	-.30	-.31	-.30	-.32	-.33	-.35	-.36	-.41	-.44	-.45	-.44	-.38
.349	-.25	-.25	-.28	-.27	-.29	-.30	-.31	-.30	-.33	-.33	-.35	-.36	-.41	-.47	-.50	-.49	-.44
.400	-.25	-.25	-.28	-.27	-.29	-.30	-.31	-.31	-.33	-.33	-.35	-.36	-.41	-.47	-.53	-.53	-.48
.499	-.23	-.23	-.25	-.25	-.27	-.27	-.29	-.28	-.30	-.30	-.32	-.33	-.37	-.43	-.56	-.66	-.60
.549	-.20	-.19	-.22	-.21	-.23	-.23	-.25	-.24	-.26	-.26	-.28	-.28	-.33	-.39	-.52	-.68	-.64
.598	-.17	-.16	-.19	-.18	-.20	-.20	-.22	-.21	-.23	-.23	-.24	-.26	-.29	-.35	-.51	-.66	-.66
.649	-.14	-.14	-.16	-.15	-.17	-.17	-.18	-.17	-.19	-.18	-.17	-.15	-.14	-.09	-.29	-.63	-.68
.701	-.11	-.10	-.10	-.09	-.09	-.08	-.08	-.07	-.08	-.06	-.06	-.06	-.07	-.06	-.05	-.60	-.67
.751	-.06	-.04	-.05	-.04	-.04	-.04	-.05	-.04	-.05	-.03	-.03	-.03	-.03	-.02	.01	-.51	-.66
.802	-.01	0	-.02	-.01	-.01	-.01	-.01	0	-.01	0	0	.02	.01	.02	.05	-.29	-.65
.849	.02	.02	.01	.02	.02	.02	.02	.03	.02	.04	.04	.05	.04	.05	.07	-.12	-.64
.951	.09	.11	.11	.12	.12	.13	.12	.13	.14	.15	.16	.17	.16	.17	.17	.11	-.51
1.000	.17	.18	.18	.20	.20	.21	.20	.21	.22	.23	.24	.25	.24	.25	.22	.14	-.43

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.70	0.73	0.76	0.79	0.81	0.84	0.87	0.90	0.93
0.005	0	0.01	0.03	0.06	0.07	0.09	0.10	0.11	0.14	0.17	0.21	0.25	0.28	0.34	0.41	0.49	0.55
.014	-.39	-.40	-.42	-.40	-.41	-.41	-.42	-.40	-.40	-.37	-.34	-.30	-.26	-.19	-.11	-.02	.06
.049	-.34	-.35	-.37	-.37	-.39	-.39	-.41	-.40	-.40	-.39	-.39	-.37	-.35	-.29	-.23	-.15	-.08
.073	-.35	-.35	-.38	-.38	-.40	-.40	-.43	-.42	-.43	-.43	-.43	-.42	-.40	-.35	-.29	-.22	-.15
.098	-.35	-.35	-.39	-.39	-.41	-.41	-.44	-.44	-.46	-.45	-.47	-.46	-.45	-.40	-.34	-.27	-.20
.152	-.35	-.36	-.39	-.40	-.42	-.43	-.45	-.45	-.47	-.48	-.50	-.51	-.53	-.50	-.44	-.37	-.30
.251	-.36	-.36	-.40	-.40	-.43	-.44	-.47	-.47	-.50	-.51	-.54	-.57	-.61	-.58	-.54	-.48	-.41
.300	-.37	-.37	-.41	-.42	-.44	-.45	-.48	-.49	-.51	-.53	-.57	-.62	-.66	-.64	-.59	-.53	-.47
.351	-.36	-.37	-.40	-.41	-.43	-.44	-.47	-.47	-.50	-.52	-.57	-.65	-.73	-.72	-.67	-.61	-.54
.403	-.34	-.34	-.37	-.38	-.40	-.41	-.44	-.44	-.46	-.48	-.52	-.59	-.72	-.76	-.71	-.66	-.59
.449	-.32	-.33	-.36	-.37	-.39	-.40	-.42	-.42	-.44	-.45	-.49	-.55	-.67	-.74	-.75	-.70	-.63
.500	-.30	-.30	-.33	-.33	-.35	-.36	-.38	-.38	-.40	-.42	-.45	-.51	-.65	-.70	-.71	-.74	-.69
.549	-.26	-.26	-.29	-.30	-.32	-.33	-.35	-.35	-.36	-.38	-.39	-.33	-.61	-.69	-.69	-.70	-.73
.602	-.23	-.23	-.25	-.24	-.25	-.25	-.26	-.25	-.25	-.23	-.22	-.20	-.18	-.65	-.69	-.69	-.74
.649	-.19	-.16	-.16	-.15	-.16	-.16	-.17	-.16	-.16	-.16	-.17	-.16	-.11	-.30	-.62	-.68	-.74
.701	-.11	-.10	-.12	-.11	-.12	-.12	-.13	-.12	-.13	-.12	-.12	-.11	-.08	-.09	-.35	----	----
.751	-.07	-.07	-.09	-.08	-.08	-.08	-.09	-.08	-.08	-.07	-.07	-.06	-.04	-.01	-.15	-.40	-.72
.801	-.04	-.03	-.05	-.04	-.04	-.04	-.05	-.04	-.04	-.02	-.02	-.01	0	.04	-.03	----	----
.851	----	----	----	----	----	----	----	----	0	0	.01	.02	.03	.07	.05	-.10	-.63
.951	.08	.11	.09	.12	.11	.12	.11	.12	.13	.13	.14	.15	.16	.18	.17	.09	-.48

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(c) $\alpha_o = 0.2^o$

Upper surface																	
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.73	0.76	0.79	0.81	0.84	0.86	0.89	0.93
0	0.96	1.00	1.04	1.06	1.07	1.08	1.09	1.10	1.13	1.14	1.15	1.16	1.17	1.19	1.19	1.21	1.23
.005	.07	.07	.10	.13	.14	.15	.16	.17	.41	.42	.44	.46	.49	.51	.54	.57	.62
.029	-.32	-.35	-.35	-.34	-.37	-.37	-.37	-.38	-.20	-.21	-.19	-.18	-.17	-.13	-.10	-.06	.01
.051	-.29	-.31	-.33	-.32	-.35	-.35	-.35	-.36	-.23	-.24	-.24	-.24	-.22	-.20	-.16	-.12	-.05
.076	-.29	-.31	-.32	-.32	-.35	-.35	-.35	-.36	-.25	-.25	-.25	-.25	-.24	-.21	-.18	-.14	-.07
.101	-.30	-.32	-.34	-.33	-.37	-.37	-.37	-.39	-.29	-.30	-.30	-.30	-.30	-.27	-.24	-.20	-.13
.151	-.31	-.33	-.35	-.35	-.39	-.39	-.40	-.42	-.33	-.35	-.36	-.37	-.38	-.36	-.33	-.30	-.23
.199	-.32	-.35	-.37	-.37	-.41	-.41	-.42	-.44	-.37	-.39	-.41	-.43	-.45	-.43	-.40	-.36	-.29
.249	-.33	-.35	-.37	-.37	-.42	-.42	-.43	-.45	-.39	-.42	-.44	-.48	-.51	-.50	-.48	-.43	-.36
.301	-.33	-.36	-.37	-.38	-.42	-.43	-.43	-.46	-.41	-.44	-.46	-.51	-.57	-.57	-.55	-.51	-.43
.349	-.32	-.34	-.36	-.36	-.40	-.41	-.42	-.44	-.40	-.42	-.45	-.49	-.58	-.62	-.60	-.57	-.49
.400	-.31	-.33	-.35	-.35	-.39	-.40	-.40	-.42	-.38	-.41	-.43	-.47	-.55	-.64	-.64	-.60	-.52
.499	-.27	-.29	-.31	-.31	-.34	-.35	-.35	-.37	-.35	-.37	-.38	-.42	-.48	-.59	-.66	-.72	-.64
.549	-.24	-.26	-.27	-.27	-.30	-.31	-.32	-.33	-.31	-.33	-.34	-.38	-.44	-.58	-.64	-.70	-.68
.598	-.21	-.23	-.24	-.24	-.27	-.27	-.27	-.28	-.27	-.29	-.30	-.29	-.23	-.41	-.64	-.67	-.70
.649	-.18	-.18	-.17	-.15	-.17	-.17	-.16	-.17	-.16	-.15	-.14	-.14	-.14	-.09	-.52	-.67	-.72
.701	-.11	-.10	-.11	-.10	-.12	-.12	-.12	-.12	-.10	-.10	-.10	-.10	-.09	-.04	-.20	-.60	-.73
.751	-.06	-.07	-.07	-.06	-.08	-.08	-.08	-.08	-.06	-.06	-.05	-.05	-.05	-.01	-.03	-.38	-.72
.802	-.02	-.03	-.03	-.02	-.04	-.04	-.03	-.03	-.02	-.01	-.01	-.01	0	.03	.05	-.18	-.69
.849	0	0	0	.01	0	0	.01	.01	.02	.02	.03	.04	.04	.06	.09	-.05	-.66
.951	.10	.10	.11	.12	.11	.12	.13	.13	.14	.15	.16	.16	.17	.18	.19	.15	-.60
1.000	.17	.18	.19	.20	.20	.20	.21	.22	.22	.23	.24	.25	.25	.26	.24	.19	-.58

Lower surface																	
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.73	0.76	0.79	0.81	0.84	0.86	0.89	0.93
0.005	0.53	0.55	0.57	0.59	0.60	0.61	0.62	0.64	0.48	0.51	0.53	0.54	0.56	0.58	0.60	0.63	0.67
.014	.09	.10	.11	.13	.13	.13	.15	.16	-.01	0	.02	.04	.06	.09	.11	.14	.21
.049	-.06	-.06	-.06	-.05	-.07	-.06	-.05	-.05	-.16	-.15	-.14	-.14	-.12	-.10	-.07	-.04	.03
.073	-.11	-.12	-.12	-.11	-.13	-.13	-.12	-.12	-.22	-.22	-.21	-.21	-.20	-.18	-.15	-.12	-.05
.098	-.14	-.15	-.16	-.15	-.17	-.17	-.17	-.17	-.26	-.26	-.26	-.27	-.26	-.24	-.22	-.18	-.11
.152	-.19	-.20	-.21	-.20	-.23	-.23	-.23	-.23	-.31	-.32	-.33	-.34	-.34	-.33	-.31	-.28	-.21
.251	-.23	-.25	-.26	-.26	-.29	-.29	-.29	-.31	-.37	-.39	-.40	-.43	-.44	-.44	-.42	-.40	-.32
.300	-.25	-.27	-.28	-.29	-.32	-.32	-.33	-.34	-.40	-.42	-.44	-.48	-.51	-.51	-.49	-.47	-.39
.351	-.26	-.28	-.29	-.29	-.32	-.33	-.33	-.35	-.40	-.42	-.45	-.50	-.58	-.60	-.57	-.55	-.47
.403	-.25	-.26	-.28	-.27	-.32	-.31	-.31	-.33	-.38	-.40	-.42	-.46	-.53	-.63	-.63	-.59	-.52
.449	-.24	-.26	-.27	-.27	-.30	-.31	-.31	-.32	-.37	-.38	-.40	-.43	-.49	-.61	-.66	-.64	-.56
.500	-.22	-.24	-.25	-.25	-.28	-.28	-.28	-.29	-.33	-.34	-.36	-.39	-.46	-.57	-.65	-.70	-.62
.549	-.19	-.21	-.21	-.21	-.24	-.24	-.24	-.26	-.29	-.30	-.33	-.36	-.39	-.55	-.62	-.70	-.66
.602	-.16	-.17	-.18	-.18	-.20	-.21	-.21	-.22	-.26	-.27	-.27	-.25	-.19	-.28	-.61	-.66	-.68
.649	-.13	-.14	-.15	-.14	-.17	-.17	-.16	-.17	-.14	-.13	-.12	-.12	-.12	-.07	-.49	-.65	-.69
.701	-.10	-.10	-.08	-.06	-.08	-.07	-.07	-.07	-.09	-.09	-.08	-.09	-.09	-.04	-.16	----	----
.751	-.04	-.04	-.04	-.03	-.05	-.05	-.04	-.04	-.05	-.05	-.05	-.04	-.04	-.01	-.01	-.44	-.70
.801	0	-.01	-.01	0	-.02	-.02	-.01	-.01	-.02	-.01	0	0	0	.03	.06	----	----
.851	----	----	----	----	----	----	----	----	----	.02	.02	.01	.03	.05	.09	-.03	-.67
.951	.10	.10	.11	.12	.11	.12	.13	.13	.13	.14	.14	.13	.16	.17	.18	.16	-.58

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(d) $\alpha_o = 1.2^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.71	0.73	0.76	0.79	0,82	0.84	0.87	0.89	0.93
0	0.93	0.97	0.99	1.01	1.03	1.04	1.05	1.07	1.09	1.09	1.11	1.13	1.15	1.17	1.19	1.21	1.22
.005	-.12	-.12	-.08	-.08	-.05	-.03	-.02	.02	.04	.06	.11	.15	.21	.27	.36	.44	.49
.029	-.44	-.47	-.47	-.49	-.50	-.49	-.52	-.51	-.52	-.53	-.52	-.50	-.45	-.39	-.29	-.20	-.12
.051	-.37	-.41	-.42	-.42	-.44	-.43	-.47	-.47	-.47	-.50	-.50	-.49	-.45	-.40	-.32	-.24	-.17
.076	-.35	-.38	-.39	-.40	-.42	-.42	-.45	-.45	-.45	-.46	-.46	-.45	-.42	-.37	-.30	-.23	-.16
.101	-.35	-.38	-.39	-.41	-.43	-.43	-.46	-.46	-.47	-.49	-.50	-.48	-.46	-.41	-.34	-.28	-.21
.151	-.36	-.39	-.40	-.42	-.44	-.44	-.47	-.48	-.49	-.51	-.54	-.56	-.55	-.52	-.45	-.39	-.32
.199	-.36	-.39	-.40	-.42	-.45	-.45	-.48	-.49	-.51	-.54	-.57	-.60	-.59	-.57	-.51	-.45	-.37
.249	-.36	-.39	-.41	-.43	-.45	-.45	-.49	-.50	-.51	-.55	-.59	-.66	-.65	-.63	-.57	-.50	-.43
.301	-.36	-.39	-.40	-.42	-.45	-.45	-.49	-.50	-.52	-.55	-.60	-.69	-.72	-.69	-.64	-.58	-.50
.349	-.34	-.37	-.38	-.41	-.43	-.43	-.46	-.47	-.49	-.52	-.56	-.66	-.76	-.74	-.68	-.63	-.55
.400	-.33	-.36	-.37	-.39	-.41	-.41	-.44	-.45	-.47	-.49	-.52	-.60	-.75	-.77	-.72	-.66	-.59
.499	-.29	-.32	-.33	-.34	-.36	-.36	-.39	-.40	-.42	-.43	-.46	-.53	-.68	-.71	-.73	-.73	-.70
.549	-.25	-.28	-.29	-.31	-.32	-.32	-.35	-.36	-.38	-.39	-.40	-.33	-.63	-.71	-.71	-.70	-.74
.598	-.22	-.25	-.24	-.25	-.26	-.25	-.27	-.26	-.26	-.25	-.24	-.23	-.24	-.65	-.71	-.69	-.76
.649	-.18	-.18	-.17	-.17	-.18	-.17	-.19	-.19	-.19	-.19	-.19	-.19	-.11	-.30	-.62	-.68	-.77
.701	-.10	-.12	-.12	-.10	-.13	-.12	-.14	-.13	-.14	-.13	-.13	-.12	-.06	-.10	-.38	-.54	-.77
.751	-.07	-.08	-.08	-.08	-.09	-.08	-.09	-.09	-.09	-.08	-.07	-.07	-.03	-.01	-.21	-.36	-.76
.802	-.03	-.04	-.04	-.04	-.04	-.03	-.05	-.04	-.03	-.03	-.02	-.01	.02	.04	-.08	-.23	-.72
.849	0	-.01	0	0	0	.01	-.01	0	.01	.01	.02	.03	.05	.09	.01	-.12	-.68
.951	.10	.09	.11	.11	.12	.13	.12	.13	.13	.15	.16	.17	.18	.19	.14	.07	-.56
1.000	.17	.17	.19	.19	.20	.21	.20	.21	.22	.23	.24	.25	.25	.24	.19	.11	-.51

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.71	0.73	0.76	0.79	0.82	0.84	0.87	0.89	0.93
0.005	0.65	0.66	0.68	0.70	0.71	0.73	0.73	0.74	0.75	0.76	0.77	0.78	0.79	0.78	0.76	0.75	0.77
.014	.21	.22	.24	.25	.26	.27	.27	.28	.28	.30	.31	.32	.33	.32	.31	.29	.32
.049	.01	0	.01	.02	.02	.04	.02	.03	.03	.05	.06	.07	.08	.08	.07	.07	.11
.073	-.05	-.06	-.06	-.05	-.06	-.04	-.06	-.05	-.05	-.04	-.03	-.02	-.01	-.01	-.02	-.02	.02
.098	-.09	-.11	-.10	-.10	-.11	-.09	-.11	-.11	-.11	-.10	-.10	-.09	-.08	-.09	-.09	-.09	-.05
.152	-.14	-.16	-.16	-.16	-.17	-.16	-.18	-.18	-.19	-.18	-.18	-.18	-.18	-.18	-.19	-.19	-.14
.251	-.20	-.22	-.22	-.23	-.25	-.24	-.26	-.26	-.27	-.27	-.28	-.30	-.30	-.32	-.32	-.32	-.27
.300	-.23	-.25	-.25	-.26	-.28	-.27	-.30	-.30	-.31	-.32	-.33	-.35	-.37	-.40	-.40	-.40	-.34
.351	-.23	-.26	-.26	-.27	-.29	-.28	-.31	-.31	-.32	-.33	-.34	-.37	-.40	-.47	-.50	-.48	-.43
.403	-.23	-.25	-.25	-.26	-.28	-.27	-.30	-.30	-.31	-.32	-.33	-.35	-.39	-.46	-.55	-.54	-.48
.449	-.22	-.24	-.25	-.26	-.28	-.27	-.29	-.30	-.31	-.31	-.33	-.35	-.38	-.43	-.58	-.59	-.53
.500	-.20	-.23	-.23	-.24	-.25	-.25	-.27	-.27	-.28	-.28	-.30	-.31	-.34	-.39	-.57	-.65	-.59
.549	-.18	-.20	-.20	-.21	-.22	-.21	-.23	-.23	-.24	-.24	-.25	-.27	-.30	-.35	-.53	-.68	-.64
.602	-.14	-.16	-.16	-.17	-.18	-.18	-.20	-.20	-.21	-.21	-.22	-.24	-.25	-.25	-.51	-.66	-.66
.649	-.11	-.13	-.13	-.14	-.15	-.15	-.17	-.16	-.17	-.16	-.16	-.14	-.11	-.08	-.29	-.64	-.67
.701	-.09	-.10	-.08	-.08	-.07	-.06	-.07	-.06	-.06	-.05	-.05	-.05	-.05	-.05	-.06	----	----
.751	-.04	-.04	-.03	-.03	-.03	-.02	-.04	-.03	-.03	-.03	-.02	-.02	-.02	-.02	.01	-.55	-.67
.801	0	-.01	0	0	-.01	.01	-.01	0	0	.01	.01	.01	.02	.02	.04	----	----
.851	----	----	----	----	----	----	----	----	----	.03	.03	.03	.04	.04	.05	-.11	-.64
.951	.10	.09	.11	.12	.12	.13	.12	.13	.13	.14	.14	.15	.16	.16	.13	.11	-.54

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(e) $\alpha_o = 2.2^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.90	0.93
0	0.65	0.67	0.73	0.75	0.79	0.81	0.84	0.87	0.88	0.92	0.96	1.00	1.04	1.10	1.15	1.18	1.20
.005	-.57	-.56	-.55	-.54	-.50	-.48	-.46	-.41	-.37	-.27	-.21	-.13	-.04	.08	.21	.31	.36
.029	-.68	-.70	-.74	-.77	-.81	-.82	-.87	-.87	-.94	-.94	-.91	-.82	-.72	-.59	-.44	-.34	-.27
.051	-.54	-.56	-.61	-.64	-.67	-.68	-.71	-.72	-.79	-.81	-.89	-.84	-.76	-.63	-.49	-.38	-.31
.076	-.49	-.51	-.55	-.57	-.60	-.61	-.64	-.64	-.69	-.70	-.77	-.77	-.71	-.59	-.45	-.34	-.27
.101	-.47	-.49	-.54	-.55	-.59	-.59	-.62	-.63	-.68	-.67	-.72	-.73	-.69	-.57	-.44	-.35	-.29
.151	-.45	-.47	-.51	-.53	-.57	-.57	-.60	-.62	-.67	-.69	-.75	-.75	-.72	-.62	-.51	-.44	-.38
.199	-.44	-.46	-.50	-.52	-.56	-.56	-.59	-.60	-.66	-.68	-.77	-.78	-.75	-.67	-.57	-.50	-.44
.249	-.43	-.45	-.49	-.51	-.54	-.55	-.58	-.59	-.65	-.68	-.78	-.82	-.80	-.73	-.63	-.56	-.50
.301	-.42	-.43	-.48	-.49	-.53	-.54	-.56	-.58	-.63	-.66	-.78	-.88	-.87	-.80	-.70	-.63	-.56
.349	-.40	-.41	-.45	-.47	-.50	-.50	-.52	-.54	-.59	-.61	-.72	-.87	-.91	-.84	-.74	-.68	-.61
.400	-.38	-.39	-.43	-.45	-.48	-.48	-.51	-.51	-.56	-.56	-.66	-.81	-.87	-.84	-.77	-.71	-.64
.499	-.33	-.34	-.37	-.38	-.40	-.40	-.43	-.43	-.46	-.45	-.44	-.69	-.83	-.79	-.73	-.74	-.75
.549	-.29	-.28	-.31	-.31	-.33	-.33	-.36	-.35	-.37	-.35	-.35	-.28	-.80	-.79	-.73	-.72	-.77
.598	-.23	-.23	-.26	-.26	-.28	-.28	-.30	-.29	-.31	-.28	-.29	-.21	-.48	-.66	-.69	-.71	-.78
.649	-.18	-.18	-.21	-.21	-.22	-.22	-.24	-.23	-.24	-.22	-.22	-.16	-.25	-.45	-.52	-.65	-.77
.701	-.13	-.13	-.15	-.15	-.16	-.15	-.17	-.16	-.17	-.14	-.15	-.11	-.12	-.30	-.38	-.51	-.76
.751	-.09	-.09	-.10	-.10	-.11	-.10	-.11	-.10	-.10	-.08	-.09	-.06	-.04	-.18	-.29	-.38	-.73
.802	-.05	-.04	-.05	-.05	-.05	-.05	-.06	-.05	-.05	-.03	-.03	-.01	.02	-.08	-.20	-.28	-.68
.849	-.01	0	-.01	-.01	-.01	-.01	-.01	0	-.01	.02	.02	.04	.06	-.01	-.12	-.20	-.60
.951	.10	.11	.10	.11	.11	.12	.12	.13	.13	.16	.15	.17	.17	.12	.03	-.04	-.38
1.000	.17	.18	.17	.18	.18	.19	.19	.20	.20	.22	.23	.24	.22	.15	.07	0	-.31

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.90	0.93
0.005	0.83	0.86	0.88	0.88	0.90	0.90	0.91	0.91	0.92	0.93	0.94	0.94	0.93	0.89	0.88	0.86	0.87
.014	.43	.46	.46	.48	.49	.49	.50	.50	.51	.52	.53	.53	.52	.48	.45	.42	.45
.049	.15	.17	.16	.17	.18	.19	.18	.19	.20	.22	.22	.23	.22	.20	.19	.17	.20
.073	.07	.08	.07	.08	.09	.09	.09	.10	.10	.12	.12	.13	.12	.10	.09	.08	.11
.098	.01	.02	.01	.02	.02	.02	.01	.02	.02	.04	.04	.05	.04	.02	.01	0	.03
.152	-.06	-.05	-.07	-.06	-.07	-.07	-.08	-.07	-.07	-.06	-.06	-.05	-.07	-.08	-.10	-.10	-.07
.251	-.14	-.13	-.15	-.16	-.17	-.16	-.18	-.18	-.18	-.17	-.18	-.18	-.21	-.23	-.24	-.24	-.21
.300	-.17	-.17	-.19	-.19	-.21	-.21	-.22	-.22	-.23	-.22	-.24	-.24	-.27	-.31	-.33	-.33	-.29
.351	-.18	-.18	-.21	-.21	-.23	-.23	-.24	-.24	-.25	-.24	-.26	-.27	-.31	-.37	-.42	-.42	-.38
.403	-.18	-.18	-.20	-.21	-.22	-.22	-.24	-.24	-.25	-.24	-.26	-.27	-.30	-.36	-.47	-.48	-.43
.449	-.18	-.18	-.21	-.21	-.23	-.23	-.25	-.24	-.26	-.25	-.26	-.27	-.31	-.37	-.51	-.53	-.48
.500	-.17	-.17	-.19	-.19	-.21	-.21	-.23	-.22	-.23	-.22	-.24	-.25	-.28	-.34	-.51	-.59	-.54
.549	-.15	-.15	-.17	-.17	-.18	-.18	-.20	-.19	-.21	-.19	-.20	-.21	-.24	-.29	-.47	-.64	-.59
.602	-.11	-.11	-.13	-.13	-.14	-.14	-.16	-.16	-.17	-.15	-.17	-.17	-.20	-.26	-.45	-.65	-.61
.649	-.09	-.09	-.10	-.11	-.12	-.12	-.13	-.13	-.14	-.13	-.14	-.14	-.16	-.16	-.34	-.64	-.62
.701	-.06	-.06	-.08	-.08	-.09	-.08	-.09	-.08	-.09	-.06	-.05	-.04	-.04	-.04	-.10	----	----
.751	-.04	-.03	-.03	-.02	-.02	-.01	-.02	-.01	-.02	0	0	.01	-.01	-.02	-.02	-.58	-.60
.801	0	.02	.01	.01	.01	.01	0	.01	.01	.03	.03	.04	.02	0	.01	----	----
.851	----	----	----	----	----	----	----	----	.02	.04	.04	.05	.03	.01	0	-.32	-.57
.951	.11	.11	.11	.11	.11	.12	.12	.12	.13	.14	.14	.15	.14	.10	.06	-.02	-.44

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA $64A010$ AIRFOIL SECTION - Continued

(f) $\alpha_0 = 4.2^{\circ}$

Upper surface																
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.74	0.76	0.79	0.82	0.85	0.87	0.90
0	-0.62	-0.56	-0.40	-0.26	-0.02	0.07	0.18	0.27	0.35	0.44	0.56	0.69	0.81	0.91	1.00	1.07
.005	-1.64	-1.75	-1.78	-1.72	-1.49	-1.36	-1.21	-1.07	-.96	-.82	-.66	-.47	-.31	-.17	-.05	.08
.029	-1.23	-1.38	-1.53	-1.70	-1.77	-1.77	-1.80	-1.76	-1.65	-1.50	-1.34	-1.16	-.99	-.86	-.72	-.58
.051	-.89	-.93	-.96	-.99	-1.48	-1.68	-1.65	-1.66	-1.55	-1.48	-1.34	-1.16	-1.00	-.88	-.75	-.61
.076	-.75	-.82	-.88	-.91	-.86	-.98	-1.64	-1.54	-1.54	-1.42	-1.29	-1.12	-.97	-.85	-.72	-.59
.101	-.71	-.77	-.83	-.87	-.85	-.82	-.98	-1.48	-1.48	-1.38	-1.26	-1.09	-.95	-.83	-.71	-.58
.151	-.63	-.69	-.74	-.78	-.78	-.79	-.74	-1.00	-1.39	-1.36	-1.25	-1.11	-.97	-.86	-.75	-.63
.199	-.59	-.65	-.69	-.73	-.74	-.75	-.75	-.64	-1.31	-1.35	-1.25	-1.11	-.98	-.88	-.78	-.66
.249	-.55	-.61	-.65	-.69	-.69	-.71	-.72	-.68	-.97	-1.32	-1.27	-1.14	-1.02	-.92	-.82	-.71
.301	-.52	-.57	-.61	-.64	-.65	-.67	-.69	-.68	-.57	-1.26	-1.27	-1.16	-1.05	-.96	-.87	-.76
.349	-.49	-.53	-.57	-.60	-.60	-.61	-.63	-.63	-.56	-1.22	-1.22	-1.11	-1.01	-.94	-.88	-.80
.400	-.46	-.50	-.53	-.56	-.56	-.57	-.59	-.59	-.57	-.75	-1.20	-1.10	-.99	-.92	-.85	-.80
.499	-.38	-.42	-.44	-.46	-.47	-.47	-.48	-.49	-.47	-.36	-.67	-.86	-.85	-.85	-.83	-.79
.549	-.32	-.35	-.36	-.38	-.39	-.39	-.39	-.40	-.39	-.31	-.44	-.62	-.64	-.68	-.73	-.78
.598	-.27	-.29	-.30	-.32	-.32	-.32	-.32	-.33	-.32	-.27	-.30	-.49	-.53	-.57	-.61	-.72
.649	-.21	-.24	-.24	-.25	-.25	-.25	-.25	-.25	-.24	-.21	-.20	-.37	-.45	-.49	-.52	-.63
.701	-.16	-.17	-.18	-.18	-.18	-.18	-.18	-.18	-.17	-.15	-.13	-.26	-.38	-.43	-.46	-.56
.751	-.11	-.12	-.12	-.13	-.12	-.12	-.12	-.12	-.11	-.09	-.07	-.17	-.30	-.38	-.42	-.49
.802	-.05	-.07	-.07	-.07	-.07	-.06	-.06	-.06	-.04	-.03	-.01	-.09	-.23	-.32	-.37	-.43
.849	-.01	-.03	-.02	-.02	-.02	-.01	-.01	-.01	0	.01	.03	-.03	-.16	-.27	-.33	-.39
.951	.10	.09	.10	.10	.10	.10	.11	.12	.13	.13	.13	.08	-.04	-.16	-.24	-.29
1.000	.15	.14	.15	.14	.15	.14	.15	.16	.17	.18	.17	.11	-.01	-.12	-.20	-.27
Lower surface																
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.74	0.76	0.79	0.82	0.85	0.87	0.90
0.005	1.01	1.04	1.06	1.07	1.07	1.08	1.08	1.09	1.09	1.09	1.09	1.09	1.06	1.03	1.02	1.00
.014	.77	.79	.81	.81	.80	.81	.81	.80	.80	.80	.78	.76	.71	.68	.65	.62
.049	.41	.42	.44	.44	.44	.44	.45	.45	.45	.45	.44	.43	.40	.36	.34	.33
.073	.30	.30	.32	.32	.32	.32	.33	.33	.33	.34	.33	.32	.29	.25	.23	.23
.098	.22	.22	.23	.23	.23	.24	.24	.24	.24	.25	.24	.23	.20	.16	.14	.14
.152	.11	.11	.12	.12	.11	.12	.12	.12	.13	.13	.12	.11	.08	.04	.02	.02
.251	0	-.01	-.01	-.02	-.02	-.02	-.02	-.02	-.02	-.02	-.03	-.04	-.08	-.12	-.15	-.14
.300	-.05	-.06	-.06	-.07	-.08	-.08	-.08	-.08	-.08	-.08	-.09	-.10	-.15	-.21	-.24	-.23
.351	-.07	-.09	-.09	-.10	-.11	-.11	-.11	-.11	-.11	-.12	-.13	-.15	-.20	-.27	-.32	-.33
.403	-.08	-.10	-.10	-.11	-.12	-.12	-.12	-.12	-.13	-.13	-.15	-.16	-.21	-.29	-.35	-.38
.449	-.10	-.11	-.12	-.13	-.14	-.14	-.14	-.14	-.15	-.15	-.17	-.18	-.24	-.33	-.41	-.43
.500	-.09	-.11	-.11	-.12	-.13	-.13	-.13	-.14	-.14	-.14	-.16	-.18	-.24	-.33	-.46	-.49
.549	-.08	-.09	-.10	-.11	-.11	-.11	-.12	-.12	-.12	-.12	-.14	-.15	-.20	-.29	-.44	-.54
.602	-.05	-.07	-.07	-.08	-.08	-.09	-.09	-.09	-.09	-.09	-.10	-.11	-.16	-.25	-.39	-.55
.649	-.04	-.05	-.05	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.07	-.09	-.14	-.21	-.37	-.56
.701	-.01	-.03	-.03	-.03	-.04	-.04	-.04	-.04	-.04	-.04	-.05	-.06	-.11	----	----	----
.751	0	-.01	-.01	-.01	-.02	-.02	-.02	-.02	-.01	-.01	-.02	-.02	-.05	-.09	-.10	-.53
.801	.02	.01	.01	.01	.01	.01	.02	.02	.03	.04	.04	.03	-.01	----	----	----
.851	----	----	----	----	----	----	----	----	----	----	----	.03	-.02	-.08	-.11	-.42
.951	.10	.10	.10	.10	.10	.10	.11	.11	.12	.13	.12	.09	.03	-.06	-.11	-.35

NACA

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(g) $\alpha_0 = 6.2^\circ$

Upper surface																	
x/c \ M	0.31	0.41	0.51	0.53	0.56	0.59	0.61	0.64	0.67	0.69	0.71	0.74	0.77	0.80	0.82	0.85	0.87
0	-2.82	-2.49	-1.71	-1.47	-1.21	-1.03	-0.82	-0.68	-0.48	-0.34	-0.15	0.05	0.25	0.43	0.58	0.73	0.82
.005	-3.02	-3.18	-2.83	-2.60	-2.53	-2.39	-2.15	-1.98	-1.75	-1.58	-1.37	-1.18	-.97	-.73	-.54	-.37	-.25
.029	-1.78	-1.93	-2.58	-2.39	-2.28	-2.28	-2.23	-2.39	-2.19	-2.05	-1.87	-1.70	-1.52	-1.31	-1.17	-1.02	-.90
.051	-1.30	-1.35	-1.74	-1.97	-2.10	-2.20	-2.23	-2.23	-2.14	-2.00	-1.84	-1.67	-1.53	-1.34	-1.19	-1.04	-.93
.076	-1.10	-1.17	-1.25	-1.43	-1.59	-1.74	-1.94	-2.17	-2.05	-1.94	-1.78	-1.63	-1.48	-1.29	-1.15	-1.01	-.90
.101	-1.00	-1.06	-1.08	-1.15	-1.27	-1.41	-1.53	-2.12	-1.97	-1.90	-1.74	-1.59	-1.45	-1.26	-1.13	-.99	-.89
.151	-.85	-.91	-.95	-.93	-.97	-1.01	-1.08	-1.19	-1.87	-1.82	-1.71	-1.57	-1.43	-1.27	-1.15	-1.01	-.91
.199	-.77	-.82	-.86	-.84	-.85	-.85	-.87	-.80	-1.67	-1.75	-1.67	-1.56	-1.42	-1.26	-1.15	-1.02	-.93
.249	-.71	-.75	-.80	-.78	-.78	-.77	-.77	-.73	-.85	-1.70	-1.61	-1.53	-1.39	-1.25	-1.15	-1.05	-.96
.301	-.66	-.70	-.73	-.72	-.72	-.71	-.70	-.70	-.61	-1.11	-1.57	-1.49	-1.36	-1.22	-1.13	-1.05	-1.00
.349	-.60	-.64	-.67	-.65	-.66	-.65	-.64	-.65	-.57	-.68	-1.18	-1.41	-1.30	-1.19	-1.10	-1.02	-.99
.400	-.56	-.59	-.62	-.60	-.60	-.59	-.58	-.60	-.55	-.52	-.77	-1.02	-1.05	-1.06	-1.05	-1.01	-.97
.499	-.46	-.48	-.50	-.48	-.48	-.47	-.46	-.48	-.46	-.42	-.43	-.58	-.67	-.69	-.73	-.83	-.93
.549	-.38	-.40	-.41	-.40	-.40	-.40	-.39	-.40	-.39	-.35	-.35	-.45	-.57	-.60	-.63	-.71	-.84
.598	-.32	-.33	-.35	-.33	-.33	-.33	-.33	-.33	-.32	-.30	-.28	-.35	-.49	-.55	-.58	-.64	-.75
.649	-.26	-.27	-.28	-.26	-.26	-.26	-.26	-.26	-.25	-.24	-.22	-.26	-.41	-.49	-.53	-.59	-.68
.701	-.20	-.20	-.21	-.19	-.19	-.20	-.19	-.19	-.19	-.18	-.17	-.19	-.33	-.43	-.50	-.55	-.63
.751	-.14	-.15	-.15	-.13	-.14	-.14	-.13	-.13	-.13	-.12	-.12	-.13	-.26	-.37	-.45	-.52	-.59
.802	-.09	-.09	-.09	-.08	-.08	-.08	-.08	-.07	-.07	-.07	-.06	-.08	-.20	-.32	-.41	-.49	-.56
.849	-.05	-.04	-.04	-.03	-.03	-.03	-.03	-.03	-.02	-.02	-.02	-.04	-.15	-.27	-.37	-.46	-.53
.951	.06	.07	.06	.08	.07	.07	.07	.07	.09	.08	.07	.05	-.04	-.17	-.28	-.38	-.47
1.000	.11	.11	.10	.11	.10	.09	.09	.10	.11	.11	.10	.07	-.03	-.14	-.24	-.34	-.44
Lower surface																	
x/c \ M	0.31	0.41	0.51	0.53	0.56	0.59	0.61	0.64	0.67	0.69	0.71	0.74	0.77	0.80	0.82	0.85	0.87
0.005	0.97	1.01	1.06	1.07	1.07	1.08	1.09	1.10	1.11	1.12	1.13	1.13	1.15	1.14	1.13	1.12	1.10
.014	.96	.98	.98	.98	.97	.97	.97	.97	.96	.96	.95	.93	.91	.88	.85	.81	.78
.049	.62	.63	.63	.63	.62	.62	.62	.62	.62	.62	.61	.58	.57	.54	.51	.48	.46
.073	.49	.50	.50	.50	.49	.49	.49	.49	.49	.49	.48	.46	.45	.42	.39	.36	.35
.098	.39	.40	.40	.41	.40	.40	.40	.40	.40	.40	.39	.37	.35	.33	.30	.27	.25
.152	.26	.27	.26	.27	.27	.26	.27	.27	.27	.27	.26	.24	.22	.20	.17	.14	.12
.251	.11	.11	.11	.11	.11	.10	.11	.10	.10	.10	.09	.07	.05	.03	-.01	-.05	-.07
.300	.06	.06	.04	.05	.05	.04	.04	.04	.04	.03	.02	.01	-.02	-.05	-.09	-.14	-.16
.351	.02	.02	0	.01	.01	0	0	-.01	-.01	-.01	-.02	-.04	-.07	-.10	-.15	-.21	-.24
.403	0	0	-.02	-.01	-.02	-.02	-.02	-.03	-.03	-.03	-.05	-.07	-.10	-.13	-.18	-.25	-.28
.449	-.02	-.02	-.04	-.03	-.04	-.05	-.05	-.05	-.06	-.06	-.08	-.10	-.13	-.17	-.22	-.31	-.35
.500	-.02	-.03	-.05	-.04	-.05	-.05	-.05	-.06	-.06	-.07	-.08	-.10	-.13	-.17	-.23	-.33	-.42
.549	-.02	-.03	-.04	-.03	-.04	-.05	-.05	-.05	-.05	-.06	-.07	-.09	-.12	-.16	-.21	-.31	-.43
.602	0	-.01	-.02	-.01	-.02	-.03	-.03	-.03	-.03	-.04	-.05	-.07	-.10	-.13	-.18	-.27	-.37
.649	.01	.01	-.01	0	-.01	-.01	-.01	-.02	-.02	-.02	-.03	-.05	-.08	-.11	-.16	-.24	-.33
.701	.03	.02	.01	.02	.01	.01	.01	0	0	0	-.01	-.03	-.06	-.09	----	----	----
.751	.04	.03	.02	.03	.03	.02	.02	.02	.02	.02	.01	-.01	-.04	-.07	-.12	-.19	-.23
.801	.05	.05	.03	.04	.04	.03	.03	.03	.03	.03	.02	0	-.03	-.06	----	----	----
.851	----	----	----	----	----	----	----	----	----	----	----	----	----	-.07	-.12	-.18	-.19
.951	.09	.09	.07	.09	.08	.08	.08	.08	.09	.09	.08	.07	.01	-.06	-.12	-.20	-.23

NACA

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(h) $\alpha_o = 8.2^\circ$

Upper surface

x/c \ M	0.32	0.41	0.51	0.53	0.56	0.58	0.61	0.64	0.66	0.68	0.71	0.74	0.77	0.80	0.82
0	-5.16	-3.29	-2.00	-1.81	-1.61	-1.37	-1.07	-0.91	-0.72	-0.55	-0.33	-0.14	0	0.18	0.34
.005	-4.70	-3.13	-2.06	-2.02	-1.88	-2.48	-1.84	-2.05	-1.94	-1.71	-1.42	-1.20	-1.11	-.95	-.77
.029	-2.35	-2.28	-1.83	-1.84	-1.76	-2.31	-1.73	-1.97	-1.99	-1.93	-1.61	-1.40	-1.47	-1.43	-1.28
.051	-1.69	-2.00	-1.79	-1.78	-1.72	-2.08	-1.68	-1.91	-1.95	-1.85	-1.49	-1.35	-1.42	-1.44	-1.31
.076	-1.47	-1.82	-1.75	-1.72	-1.68	-1.84	-1.62	-1.75	-1.79	-1.72	-1.43	-1.27	-1.38	-1.39	-1.27
.101	-1.29	-1.59	-1.70	-1.67	-1.64	-1.67	-1.57	-1.62	-1.62	-1.62	-1.39	-1.24	-1.36	-1.37	-1.24
.151	-1.05	-1.20	-1.46	-1.48	-1.48	-1.38	-1.43	-1.39	-1.36	-1.38	-1.26	-1.16	-1.31	-1.36	-1.24
.199	-.92	-.97	-1.17	-1.23	-1.26	-1.15	-1.24	-1.18	-1.18	-1.15	-1.12	-1.07	-1.23	-1.32	-1.23
.249	-.82	-.84	-.93	-.99	-1.03	-.97	-1.06	-1.01	-1.02	-.97	-.97	-.97	-1.13	-1.28	-1.21
.301	-.74	-.74	-.77	-.82	-.86	-.82	-.89	-.85	-.88	-.84	-.84	-.85	-.95	-1.19	-1.18
.349	-.67	-.67	-.66	-.69	-.73	-.70	-.75	-.74	-.78	-.76	-.76	-.76	-.82	-1.02	-1.11
.400	-.61	-.60	-.57	-.60	-.62	-.61	-.64	-.64	-.69	-.71	-.70	-.70	-.73	-.84	-.99
.499	-.48	-.48	-.44	-.46	-.48	-.46	-.47	-.49	-.55	-.60	-.63	-.63	-.63	-.68	-.74
.549	-.41	-.41	-.37	-.39	-.41	-.39	-.40	-.42	-.49	-.55	-.59	-.60	-.60	-.63	-.68
.598	-.34	-.34	-.32	-.33	-.35	-.33	-.35	-.37	-.44	-.50	-.56	-.58	-.57	-.60	-.65
.649	-.27	-.28	-.26	-.28	-.30	-.28	-.29	-.31	-.39	-.46	-.53	-.55	-.53	-.56	-.62
.701	-.20	-.22	-.21	-.23	-.25	-.22	-.25	-.27	-.34	-.42	-.49	-.52	-.51	-.53	-.59
.751	-.15	-.21	-.17	-.18	-.21	-.19	-.21	-.23	-.30	-.38	-.46	-.48	-.47	-.51	-.57
.802	-.09	-.12	-.13	-.14	-.17	-.14	-.17	-.19	-.26	-.33	-.41	-.44	-.43	-.47	-.54
.849	-.04	-.08	-.09	-.11	-.13	-.12	-.14	-.17	-.23	-.29	-.38	-.41	-.40	-.45	-.52
.951	.05	.01	-.02	-.04	-.07	-.05	-.07	-.10	-.17	-.21	-.28	-.31	-.31	-.37	-.45
1.000	.09	.05	.01	-.01	-.03	-.03	-.05	-.08	-.13	-.16	-.22	-.26	-.27	-.32	-.40

Lower surface

x/c \ M	0.32	0.41	0.51	0.53	0.56	0.58	0.61	0.64	0.66	0.68	0.71	0.74	0.77	0.80	0.82
0.005	0.80	0.92	1.03	1.04	1.05	1.07	1.09	1.10	1.11	1.12	1.13	1.14	1.15	1.16	1.16
.014	1.02	1.03	1.03	1.04	1.02	1.03	1.03	1.02	1.01	1.01	.99	.99	.96	.96	.94
.049	.77	.74	.72	.72	.70	.71	.70	.70	.68	.67	.66	.65	.65	.63	.61
.073	.64	.61	.59	.59	.58	.58	.57	.57	.55	.55	.54	.53	.53	.51	.48
.098	.54	.51	.49	.49	.48	.48	.48	.47	.45	.45	.44	.43	.43	.41	.39
.152	.39	.36	.35	.35	.33	.34	.33	.33	.31	.30	.30	.29	.29	.27	.25
.251	.22	.19	.18	.17	.16	.17	.16	.15	.13	.12	.12	.11	.10	.08	.06
.300	.15	.13	.12	.11	.09	.10	.09	.08	.06	.05	.04	.03	.03	.01	-.03
.351	.11	.08	.07	.06	.04	.05	.04	.03	0	-.01	-.01	-.02	-.03	-.06	-.09
.403	.08	.05	.04	.03	.01	.02	.01	0	-.03	-.04	-.05	-.06	-.07	-.10	-.14
.449	.05	.02	.01	-.01	-.02	-.02	-.03	-.03	-.07	-.08	-.09	-.10	-.11	-.15	-.19
.500	.04	.01	-.01	-.02	-.04	-.03	-.04	-.05	-.08	-.09	-.11	-.12	-.13	-.17	-.21
.549	.03	0	-.01	-.02	-.04	-.03	-.04	-.05	-.08	-.09	-.11	-.12	-.13	-.16	-.21
.602	.04	.01	0	-.01	-.03	-.02	-.03	-.04	-.07	-.08	-.09	-.11	-.12	-.15	-.19
.649	.05	.02	.01	0	-.02	-.01	-.02	-.03	-.06	-.07	-.08	-.10	-.11	-.14	-.18
.701	.06	.03	.02	.01	-.01	-.01	-.01	-.02	-.06	-.06	-.07	-.09	-.10	----	----
.751	.06	.04	.02	.01	0	0	-.01	-.02	-.05	-.06	-.07	-.08	-.09	-.12	-.16
.801	.07	.04	.03	.01	0	0	-.01	-.02	-.06	-.06	-.07	-.09	-.09	----	----
.851	.07	.03	.02	0	-.01	-.01	-.01	----	----	----	----	----	-.11	-.15	-.19
.951	.09	.05	.02	0	-.01	-.01	-.02	-.04	-.08	-.09	-.12	-.15	-.15	-.19	-.23

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(i) $\alpha_o = 10.2^o$

Upper surface															
x/c \ M	0.31	0.42	0.51	0.54	0.57	0.59	0.61	0.64	0.67	0.69	0.72	0.75	0.77	0.80	0.84
0	-2.21	-2.34	-1.48	-1.33	-1.25	-1.16	-0.99	-1.08	-0.81	-0.57	-0.33	-0.26	-0.15	-0.02	0.12
.005	-1.73	-2.00	-1.33	-1.22	-1.23	-1.17	-1.04	-1.82	-1.50	-1.05	-.67	-.86	-.76	-1.08	.93
.029	-1.57	-1.61	-1.18	-1.10	-1.10	-1.06	-.96	-1.75	-1.40	-1.01	-.65	-.70	-.57	-1.27	-1.34
.051	-1.59	-1.55	-1.18	-1.11	-1.08	-1.05	-.96	-1.63	-1.28	-.95	-.64	-.69	-.57	-.84	-1.35
.076	-1.57	-1.51	-1.18	-1.09	-1.09	-1.04	-.95	-1.55	-1.20	-.91	-.63	-.68	-.57	-.80	-1.31
.101	-1.54	-1.45	-1.18	-1.10	-1.08	-1.05	-.96	-1.49	-1.17	-.90	-.63	-.68	-.57	-.79	-1.29
.151	-1.40	-1.29	-1.14	-1.06	-1.05	-1.02	-.94	-1.30	-1.08	-.86	-.63	-.67	-.57	-.78	-1.29
.199	-1.21	-1.12	-1.06	-1.00	-.99	-.98	-.91	-1.11	-.99	-.82	-.64	-.67	-.58	-.75	-1.25
.249	-1.03	-.97	-.97	-.93	-.92	-.92	-.87	-.95	-.91	-.79	-.64	-.66	-.58	-.73	-1.23
.301	-.87	-.84	-.89	-.85	-.85	-.86	-.83	-.82	-.84	-.76	-.64	-.65	-.58	-.71	-1.18
.349	-.75	-.74	-.80	-.78	-.78	-.81	-.78	-.73	-.78	-.74	-.65	-.65	-.59	-.68	-1.09
.400	-.65	-.65	-.73	-.72	-.72	-.75	-.74	-.67	-.72	-.71	-.65	-.64	-.59	-.67	-.97
.499	-.50	-.51	-.61	-.62	-.67	-.68	-.68	-.55	-.63	-.67	-.65	-.64	-.60	-.66	-.80
.549	-.43	-.45	-.55	-.57	-.58	-.63	-.64	-.50	-.60	-.64	-.65	-.64	-.62	-.66	-.76
.598	-.38	-.40	-.50	-.52	-.54	-.59	-.60	-.47	-.56	-.62	-.65	-.63	-.62	-.66	-.74
.649	-.33	-.36	-.46	-.48	-.50	-.55	-.56	-.43	-.53	-.61	-.65	-.63	-.64	-.67	-.72
.701	-.29	-.32	-.42	-.44	-.46	-.51	-.53	-.39	-.50	-.58	-.65	-.62	-.64	-.68	-.70
.751	-.25	-.28	-.37	-.40	-.42	-.47	-.49	-.36	-.46	-.56	-.63	-.60	-.64	-.68	-.68
.802	-.21	-.25	-.34	-.36	-.39	-.43	-.46	-.33	-.43	-.52	-.61	-.58	-.64	-.69	-.67
.849	-.18	-.22	-.31	-.33	-.36	-.40	-.42	-.31	-.41	-.50	-.59	-.57	-.63	-.67	-.65
.951	-.12	-.16	-.24	-.26	-.28	-.32	-.34	-.25	-.32	-.40	-.49	-.46	-.56	-.63	-.60
1.000	-.09	-.13	-.21	-.22	-.24	-.28	-.30	-.22	-.29	-.36	-.44	-.42	-.51	-.59	-.57
Lower surface															
x/c \ M	0.31	0.42	0.51	0.54	0.57	0.59	0.61	0.64	0.67	0.69	0.72	0.75	0.77	0.80	0.84
0.005	0.90	0.94	1.03	1.05	1.07	1.08	1.10	1.09	1.11	1.15	1.14	1.15	1.16	1.16	1.18
.014	1.02	1.03	1.03	1.05	1.05	1.05	1.05	1.06	1.05	1.07	1.03	1.04	1.03	1.02	1.02
.049	.76	.76	.74	.75	.74	.74	.74	.75	.74	.75	.71	.73	.71	.70	.70
.073	.64	.64	.62	.62	.62	.61	.61	.62	.61	.62	.59	.61	.59	.58	.58
.098	.54	.54	.52	.52	.52	.51	.51	.52	.51	.52	.49	.51	.49	.48	.48
.152	.40	.39	.37	.38	.38	.36	.37	.38	.37	.37	.35	.37	.35	.33	.34
.251	.22	.21	.19	.20	.19	.18	.18	.19	.18	.18	.15	.18	.15	.13	.15
.300	.15	.14	.12	.13	.12	.10	.11	.11	.10	.10	.07	.09	.07	.04	.06
.351	.10	.09	.07	.07	.06	.04	.05	.06	.05	.04	.01	.03	0	-.03	-.02
.403	.07	.05	.03	.04	.03	.01	.01	.02	0	-.01	-.03	-.01	-.04	-.07	-.07
.449	.03	.02	-.01	0	-.01	-.03	-.03	-.03	-.04	-.05	-.08	-.06	-.09	-.13	-.13
.500	.01	0	-.03	-.02	-.03	-.06	-.06	-.05	-.06	-.08	-.10	-.09	-.12	-.16	-.16
.549	0	-.01	-.04	-.03	-.04	-.07	-.07	-.06	-.07	-.08	-.11	-.09	-.13	-.17	-.17
.602	.01	-.01	-.03	-.03	-.04	-.06	-.06	-.05	-.07	-.08	-.11	-.09	-.12	-.16	-.16
.649	.01	-.01	-.03	-.03	-.04	-.06	-.06	-.05	-.07	-.08	-.11	-.09	-.13	-.16	-.15
.701	.01	0	-.03	-.03	-.04	-.06	-.06	-.05	-.07	-.08	-.11	-.09	-.12	----	----
.751	.01	-.01	-.03	-.03	-.04	-.06	-.06	-.05	-.07	-.08	-.11	-.09	-.13	-.16	-.15
.801	0	0	-.05	-.04	-.05	-.08	-.08	-.06	-.08	-.10	-.13	-.11	-.15	----	----
.851	-.01	-.02	-.07	-.07	-.08	-.10	-.11	-.09	-.11	-.13	-.16	-.15	-.19	-.21	-.20
.951	-.04	-.05	-.11	-.12	-.13	-.16	-.16	-.13	-.16	-.20	-.25	-.23	----	-.30	-.27

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TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(j) $\alpha_o = 12.2^\circ$

Upper surface														
x/c \ M	0.31	0.42	0.52	0.54	0.56	0.59	0.62	0.64	0.67	0.70	0.73	0.76	0.79	0.81
0	-1.23	-1.11	-0.97	-0.91	-0.88	-0.92	-0.88	-0.83	-0:74	-0.68	-0.64	-0.39	-0.30	-0.23
.005	-.96	-.83	-.79	-.74	-.74	-.86	-.80	-.84	-.86	-.97	-1.50	-.60	-.56	-.86
.029	-.91	-.78	-.70	-.66	-.67	-.73	-.66	-.67	-.67	-.77	-1.42	-.56	-.55	-.82
.051	-.91	-.76	-.69	-.66	-.66	-.69	-.65	-.66	-.66	-.75	-1.37	-.56	-.55	-.73
.076	-.91	-.79	-.70	-.66	-.67	-.68	-.64	-.63	-.62	-.73	-1.27	-.55	-.55	-.68
.101	-.92	-.80	-.71	-.67	-.68	-.68	-.64	-.63	-.62	-.71	-1.08	-.55	-.55	-.67
.151	-.93	-.82	-.71	-.68	-.69	-.69	-.65	-.64	-.62	-.69	-.63	-.55	-.55	-.66
.199	-.93	-.82	-.72	-.69	-.69	-.69	-.65	-.64	-.63	-.69	-.65	-.56	-.56	-.65
.249	-.90	-.81	-.72	-.70	-.70	-.69	-.66	-.65	-.63	-.67	-.64	-.57	-.56	-.65
.301	-.87	-.80	-.72	-.70	-.70	-.68	-.67	-.65	-.64	-.67	-.64	-.57	-.56	-.65
.349	-.84	-.78	-.72	-.70	-.69	-.68	-.67	-.66	-.64	-.67	-.64	-.58	-.57	-.64
.400	-.79	-.76	-.71	-.70	-.69	-.68	-.67	-.66	-.64	-.66	-.65	-.58	-.58	-.65
.499	-.70	-.71	-.71	-.72	-.70	-.69	-.67	-.67	-.65	-.67	-.65	-.60	-.59	-.67
.549	-.65	-.68	-.70	-.71	-.70	-.69	-.67	-.68	-.66	-.67	-.65	-.61	-.60	-.67
.598	-.61	-.65	-.69	-.71	-.69	-.69	-.67	-.68	-.66	-.68	-.66	-.62	-.61	-.68
.649	-.57	-.62	-.67	-.70	-.68	-.69	-.67	-.68	-.67	-.67	-.66	-.63	-.62	-.69
.701	-.54	-.59	-.65	-.68	-.67	-.68	-.66	-.67	-.66	-.67	-.66	-.64	-.63	-.70
.751	-.50	-.56	-.63	-.66	-.65	-.66	-.64	-.66	-.65	-.66	-.66	-.64	-.64	-.70
.802	-.46	-.52	-.59	-.63	-.63	-.64	-.62	-.64	-.64	-.64	-.66	-.64	-.63	-.71
.849	-.43	-.49	-.56	-.60	-.60	-.62	-.60	-.63	-.63	-.63	-.66	-.65	-.64	-.71
.951	-.34	-.40	-.47	-.51	-.51	-.53	-.50	-.53	-.54	-.54	-.59	-.58	-.59	-.67
1.000	-.30	-.35	-.41	-.44	-.45	-.48	-.46	-.49	-.50	-.50	-.57	-.56	-.57	-.65
Lower surface														
x/c \ M	0.31	0.42	0.52	0.54	0.56	0.59	0.62	0.64	0.67	0.70	0.73	0.76	0.79	0.81
0.005	0.95	1.00	1.03	1.05	1.06	1.07	1.08	1.09	1.11	1.12	1.13	1.16	1.15	1.17
.014	1.00	1.03	1.03	1.03	1.04	1.05	1.05	1.06	1.06	1.07	1.08	1.09	1.07	1.08
.049	.75	.76	.75	.75	.75	.76	.76	.77	.77	.78	.78	.80	.78	.78
.073	.63	.64	.63	.63	.63	.64	.64	.65	.65	.66	.66	.68	.66	.67
.098	.54	.54	.53	.53	.53	.54	.54	.55	.55	.56	.56	.58	.56	.57
.152	.40	.40	.39	.38	.39	.39	.40	.40	.41	.41	.41	.43	.42	.42
.251	.22	.22	.20	.19	.20	.20	.21	.21	.21	.21	.21	.23	.22	.22
.300	.15	.15	.13	.12	.12	.12	.13	.13	.13	.13	.12	.15	.13	.13
.351	.10	.09	.07	.06	.06	.06	.07	.06	.07	.07	.06	.08	.06	.06
.403	.05	.05	.03	.01	.02	.02	.02	.01	.01	.01	.01	.03	.01	0
.449	.02	.01	-.02	-.03	-.03	-.03	-.03	-.03	-.03	-.04	-.04	-.03	-.05	-.06
.500	-.01	-.02	-.05	-.06	-.06	-.06	-.06	-.06	-.06	-.07	-.08	-.06	-.08	-.09
.549	-.03	-.03	-.06	-.07	-.07	-.08	-.07	-.08	-.08	-.08	-.09	-.08	-.10	-.11
.602	-.03	-.04	-.06	-.08	-.08	-.08	-.08	-.08	-.08	-.09	-.10	-.08	-.10	-.11
.649	-.03	-.04	-.07	-.08	-.08	-.09	-.09	-.09	-.09	-.10	-.11	-.09	-.11	-.12
.701	-.04	-.05	-.08	-.09	-.09	-.10	-.09	-.10	-.10	-.10	-.11	-.09	-.11	----
.751	-.05	-.06	-.09	-.10	-.10	-.11	-.10	-.11	-.11	-.12	-.12	-.11	-.12	-.12
.801	-.06	-.08	-.11	-.13	-.13	-.13	-.13	-.14	-.14	-.14	-.15	-.13	-.15	----
.851	-.09	-.11	-.14	-.16	-.16	-.17	-.16	-.18	-.18	-.18	-.19	-.18	-.19	-.20
.951	-.16	-.19	-.22	-.25	-.26	-.27	-.26	-.28	-.29	-.28	-.30	----	----	-.29

NACA

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(k) $\alpha_o = 14.2^o$

Upper surface												
x/c \ M	0.31	0.41	0.52	0.54	0.57	0.60	0.62	0.65	0.68	0.70	0.73	0.76
0	-0.83	-0.82	-0.73	-0.88	-0.88	-0.75	-0.77	-0.69	-0.70	-0.72	-0.65	-0.48
.005	-.57	-.63	-.60	-.70	-.66	-.64	-.71	-.62	-.64	-.81	-.73	-.61
.029	-.57	-.59	-.56	-.62	-.61	-.57	-.64	-.57	-.63	-.78	-.73	-.59
.051	-.58	-.59	-.56	-.61	-.60	-.57	-.64	-.57	-.62	-.78	-.71	-.59
.076	-.57	-.59	-.57	-.60	-.58	-.56	-.59	-.56	-.61	-.74	-.69	-.59
.101	-.58	-.59	-.57	-.59	-.58	-.56	-.58	-.56	-.61	-.73	-.69	-.59
.151	-.59	-.60	-.57	-.60	-.58	-.56	-.57	-.56	-.61	-.71	-.68	-.59
.199	-.62	-.61	-.58	-.60	-.58	-.57	-.57	-.56	-.61	-.68	-.67	-.60
.249	-.63	-.61	-.58	-.60	-.59	-.57	-.58	-.57	-.61	-.67	-.67	-.60
.301	-.65	-.64	-.60	-.63	-.60	-.59	-.59	-.59	-.61	-.67	-.67	-.61
.349	-.66	-.65	-.61	-.64	-.62	-.60	-.60	-.60	-.62	-.67	-.67	-.62
.400	-.68	-.66	-.62	-.65	-.63	-.61	-.62	-.61	-.62	-.67	-.67	-.63
.499	-.69	-.68	-.66	-.67	-.66	-.65	-.65	-.64	-.64	-.67	-.67	-.65
.549	-.70	-.69	-.67	-.68	-.67	-.66	-.66	-.65	-.65	-.68	-.68	-.66
.598	-.71	-.70	-.68	-.69	-.68	-.67	-.67	-.66	-.66	-.69	-.69	-.66
.649	-.71	-.70	-.68	-.69	-.69	-.67	-.68	-.67	-.67	-.69	-.69	-.67
.701	-.70	-.70	-.68	-.70	-.69	-.68	-.68	-.67	-.68	-.70	-.69	-.68
.751	-.69	-.69	-.68	-.70	-.69	-.68	-.69	-.68	-.68	-.70	-.68	-.68
.802	-.68	-.68	-.67	-.69	-.69	-.68	-.69	-.67	-.68	-.69	-.68	-.68
.849	-.65	-.66	-.66	-.68	-.68	-.67	-.68	-.67	-.67	-.69	-.68	-.68
.951	-.57	-.58	-.60	-.62	-.63	-.62	-.64	-.63	-.63	-.64	-.63	-.64
1.000	-.51	-.53	-.54	-.58	-.59	-.58	-.60	-.59	-.59	-.60	-.60	-.60
Lower surface												
x/c \ M	0.31	0.41	0.52	0.54	0.57	0.60	0.62	0.65	0.68	0.70	0.73	0.76
0.005	0.98	1.01	1.04	1.04	1.04	1.06	1.07	1.09	1.09	1.10	1.12	1.14
.014	1.00	1.02	1.04	1.05	1.05	1.05	1.06	1.07	1.08	1.09	1.10	1.10
.049	.75	.76	.78	.78	.79	.78	.79	.80	.82	.83	.84	.84
.073	.64	.65	.66	.67	.67	.67	.67	.68	.70	.71	.72	.72
.098	.55	.55	.56	.57	.57	.57	.58	.58	.60	.68	.62	.62
.152	.40	.41	.42	.42	.43	.42	.43	.44	.45	.46	.47	.48
.251	.22	.22	.23	.23	.23	.23	.23	.24	.25	.25	.27	.27
.300	.15	.14	.15	.15	.15	.14	.15	.15	.16	.17	.18	.18
.351	.09	.08	.08	.08	.08	.08	.08	.08	.09	.09	.11	.11
.403	.04	.04	.03	.03	.03	.03	.03	.03	.03	.04	.05	.05
.449	0	-.01	-.02	-.02	-.02	-.02	-.03	-.03	-.02	-.02	0	0
.500	-.04	-.04	-.05	-.05	-.05	-.06	-.07	-.06	-.06	-.06	-.04	-.05
.549	-.06	-.06	-.07	-.07	-.08	-.08	-.09	-.08	-.08	-.08	-.07	-.07
.602	-.07	-.07	-.08	-.08	-.09	-.09	-.10	-.10	-.09	-.09	-.08	-.08
.649	-.08	-.09	-.09	-.10	-.10	-.11	-.11	-.11	-.11	-.11	-.09	-.09
.701	-.09	-.10	-.11	-.11	-.11	-.12	-.13	-.12	-.12	-.12	-.11	-.11
.751	-.11	-.12	-.13	-.13	-.13	-.14	-.15	-.14	-.14	-.14	-.12	-.12
.801	-.14	-.15	-.16	-.16	-.17	-.17	-.18	-.17	-.17	-.17	-.16	-.15
.851	-.18	-.19	-.21	-.21	-.22	-.22	-.23	-.23	-.22	-.22	-.21	-.21
.951	-.30	-.31	-.33	-.34	-.35	-.35	-.36	-.36	-.35	-.35	-.34	----

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(l) $\alpha_o = 16.2^\circ$

Upper surface												
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.59	0.62	0.64	0.67	0.70	0.73	0.76
0	-0.83	-0.81	-0.80	-0.81	-0.81	-0.96	-1.10	-0.71	-0.69	-0.68	-0.66	-0.65
.005	-.57	-.58	-.58	-.63	-.60	-.75	-.83	-.59	-.61	-.63	-.61	-.66
.029	-.56	-.57	-.56	-.59	-.58	-.72	-.80	-.58	-.60	-.62	-.60	-.65
.051	-.56	-.57	-.56	-.60	-.58	-.73	-.79	-.57	-.60	-.61	-.60	-.65
.076	-.56	-.57	-.56	-.61	-.59	-.73	-.76	-.57	-.60	-.61	-.60	-.64
.101	-.56	-.57	-.56	-.62	-.59	-.69	-.69	-.58	-.60	-.61	-.60	-.64
.151	-.57	-.58	-.57	-.62	-.59	-.62	-.62	-.59	-.61	-.61	-.61	-.64
.199	-.58	-.58	-.57	-.62	-.60	-.61	-.61	-.59	-.61	-.62	-.61	-.65
.249	-.59	-.58	-.58	-.61	-.60	-.61	-.61	-.60	-.62	-.63	-.62	-.65
.301	-.62	-.59	-.59	-.62	-.62	-.62	-.62	-.61	-.63	-.63	-.62	-.66
.349	-.63	-.60	-.60	-.62	-.63	-.63	-.63	-.62	-.64	-.64	-.63	-.67
.400	-.64	-.61	-.62	-.63	-.65	-.63	-.64	-.62	-.65	-.66	-.64	-.67
.499	-.67	-.65	-.65	-.66	-.68	-.67	-.67	-.65	-.67	-.67	-.66	-.69
.549	-.69	-.66	-.66	-.68	-.69	-.68	-.69	-.66	-.68	-.68	-.67	-.70
.598	-.70	-.67	-.67	-.69	-.70	-.69	-.70	-.67	-.69	-.70	-.68	-.71
.649	-.71	-.68	-.68	-.69	-.71	-.70	-.71	-.68	-.70	-.70	-.69	-.72
.701	-.71	-.68	-.69	-.70	-.71	-.71	-.72	-.68	-.71	-.71	-.70	-.73
.751	-.72	-.69	-.69	-.70	-.72	-.71	-.72	-.69	-.71	-.71	-.70	-.73
.802	-.71	-.68	-.69	-.70	-.72	-.72	-.72	-.69	-.71	-.71	-.70	-.73
.849	-.70	-.67	-.69	-.70	-.71	-.72	-.73	-.70	-.71	-.72	-.71	-.74
.951	-.66	-.64	-.65	-.67	-.68	-.69	-.71	-.67	-.69	-.69	-.69	-.73
1.000	-.61	-.60	-.62	-.64	-.66	-.67	-.69	-.66	-.67	-.68	-.67	-.72
Lower surface												
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.59	0.62	0.64	0.67	0.70	0.73	0.76
0.005	0.95	0.98	1.01	1.02	1.06	1.03	1.04	1.06	1.08	1.09	1.11	1.12
.014	1.01	1.03	1.06	1.06	1.09	1.08	1.09	1.09	1.10	1.11	1.12	1.13
.049	.78	.80	.82	.82	.85	.84	.85	.85	.86	.87	.88	.89
.073	.67	.69	.71	.71	.73	.72	.73	.73	.74	.75	.76	.77
.098	.58	.60	.61	.61	.63	.62	.63	.64	.65	.66	.67	.68
.152	.43	.45	.46	.46	.48	.47	.48	.49	.50	.51	.52	.53
.251	.24	.25	.26	.26	.27	.26	.27	.28	.29	.30	.31	.32
.300	.15	.17	.18	.17	.18	.18	.18	.14	.20	.21	.22	.22
.351	.09	.11	.11	.10	.11	.10	11	.12	.12	.13	.14	.15
.403	.04	.05	.06	.05	.05	.05	.05	.06	.06	.07	.08	.09
.449	-.01	0	0	-.01	0	-.01	-.01	0	0	.01	.02	.02
.500	-.05	-.04	-.04	-.05	-.05	-.05	-.05	-.04	-.04	-.04	-.02	-.02
.549	-.07	-.06	-.07	-.07	-.07	-.08	-.08	-.07	-.07	-.06	-.05	-.05
.602	-.09	-.08	-.08	-.09	-.09	-.10	-.09	-.09	-.09	-.08	-.07	-.07
.649	-.11	-.10	-.10	-.11	-.11	-.12	-.11	-.11	-.11	-.10	-.09	-.09
.701	-.13	-.11	-.12	-.13	-.13	-.14	-.13	-.13	-.13	-.12	-.11	-.11
.751	-.15	-.14	-.15	-.15	-.16	-.16	-.16	-.15	-.15	-.14	-.13	-.13
.801	-.19	-.18	-.18	-.19	-.20	-.20	-.20	-.19	-.19	-.18	-.17	-.17
.851	-.24	-.23	-.24	-.25	-.25	-.26	-.26	-.25	-.25	-.24	-.23	-.22
.951	-.38	-.37	-.38	-.40	-.40	-.41	-.41	-.40	-.40	-.39	----	----

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(m) $\alpha_o = 18.2^\circ$

Upper surface								
x/c \ M	0.31	0.41	0.51	0.54	0.57	0.59	0.62	0.65
0	-0.92	-1.11	-1.19	-1.19	-1.07	-1.04	-0.95	-1.00
.005	-.67	-.97	-.96	-.96	-.88	-.95	-.88	-.90
.029	-.67	-.97	-.97	-.96	-.89	-.93	-.86	-.91
.051	-.67	-.99	-1.00	-.98	-.87	-.78	-.74	-.93
.076	-.68	-1.02	-1.02	-1.01	-.89	-.78	-.72	-.96
.101	-.70	-1.03	-1.03	-1.01	-.89	-.77	-.71	-.97
.151	-.67	-.98	-.98	-.96	-.85	-.76	-.70	-.93
.199	-.65	-.88	-.88	-.87	-.79	-.73	-.69	-.84
.249	-.60	-.78	-.77	-.79	-.74	-.70	-.69	-.75
.301	-.60	-.69	-.69	-.71	-.70	-.68	-.68	-.69
.349	-.59	-.60	-.62	-.66	-.66	-.67	-.69	-.65
.400	-.58	-.56	-.58	-.64	-.65	-.66	-.69	-.62
.499	-.61	-.59	-.59	-.65	-.65	-.68	-.71	-.62
.549	-.63	-.63	-.63	-.67	-.67	-.69	-.72	-.63
.598	-.64	-.66	-.66	-.69	-.68	-.70	-.73	-.65
.649	-.66	-.69	-.69	-.71	-.70	-.71	-.74	-.67
.701	-.67	-.71	-.71	-.73	-.71	-.72	-.74	-.69
.751	-.67	-.73	-.72	-.74	-.72	-.72	-.75	-.70
.802	-.68	-.73	-.73	-.75	-.72	-.73	-.75	-.70
.849	-.67	-.73	-.73	-.75	-.73	-.73	-.76	-.72
.951	-.64	-.70	-.71	-.74	-.71	-.72	-.74	-.70
1.000	-.62	-.66	-.69	-.72	-.70	-.70	-.73	-.70
Lower surface								
x/c \ M	0.31	0.41	0.51	0.54	0.57	0.59	0.62	0.65
0.005	0.89	0.92	0.95	0.96	0.97	0.99	1.01	1.02
.014	1.02	1.06	1.07	1.07	1.08	1.09	1.10	1.11
.049	.84	.87	.88	.88	.88	.88	.89	.91
.073	.73	.76	.76	.76	.77	.77	.78	.80
.098	.64	.66	.67	.66	.67	.67	.68	.70
.152	.49	.50	.51	.51	.52	.52	.53	.55
.251	.29	.29	.30	.29	.31	.30	.31	.34
.300	.21	.20	.21	.20	.22	.21	.22	.25
.351	.14	.13	.13	.13	.14	.14	.14	.17
.403	.08	.07	.07	.07	.08	.08	.08	.11
.449	.03	.01	.01	0	.02	.01	.02	.05
.500	-.01	-.04	-.03	-.04	-.03	-.03	-.03	-.01
.549	-.04	-.07	-.07	-.08	-.06	-.07	-.06	-.04
.602	-.06	-.09	-.09	-.10	-.08	-.09	-.09	-.06
.649	-.09	-.12	-.11	-.12	-.10	-.11	-.11	-.08
.701	-.11	-.14	-.14	-.15	-.13	-.14	-.14	-.11
.751	-.14	-.17	-.17	-.18	-.16	-.17	-.17	-.14
.801	-.18	-.21	-.21	-.22	-.20	-.21	-.21	-.18
.851	-.24	-.27	-.27	-.29	-.27	-.27	-.28	-.25
.951	-.38	-.42	-.43	-.45	-.43	-.44	-.45	-.42

(n) $\alpha_o = 20.2^\circ$

Upper surface								
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.60	0.63	0.65
0	-0.68	-0.69	-0.69	-0.73	-0.79	-0.75	-0.75	-0.79
.005	-.58	-.62	-.62	-.64	-.72	-.69	-.68	-.72
.029	-.59	-.62	-.61	-.65	-.72	-.69	-.68	-.72
.051	-.58	-.62	-.61	-.65	-.71	-.68	-.68	-.72
.076	-.57	-.61	-.61	-.65	-.71	-.68	-.68	-.72
.101	-.58	-.62	-.61	-.65	-.71	-.69	-.68	-.72
.151	-.60	-.62	-.61	-.65	-.72	-.69	-.68	-.72
.199	-.60	-.62	-.62	-.65	-.72	-.69	-.68	-.72
.249	-.60	-.62	-.62	-.66	-.72	-.69	-.68	-.72
.301	-.62	-.63	-.63	-.67	-.73	-.70	-.69	-.73
.349	-.62	-.64	-.63	-.67	-.73	-.70	-.69	-.74
.400	-.62	-.65	-.64	-.67	-.73	-.71	-.70	-.74
.499	-.62	-.67	-.67	-.69	-.76	-.73	-.73	-.75
.549	-.63	-.67	-.67	-.70	-.76	-.74	-.73	-.75
.598	-.63	-.67	-.68	-.70	-.77	-.74	-.74	-.76
.649	-.64	-.68	-.68	-.71	-.78	-.75	-.74	-.76
.701	-.64	-.68	-.68	-.71	-.78	-.75	-.74	-.76
.751	-.64	-.68	-.68	-.71	-.78	-.75	-.74	-.76
.802	-.64	-.68	-.68	-.71	-.78	-.75	-.74	-.76
.849	-.63	-.68	-.68	-.71	-.78	-.75	-.74	-.77
.951	-.61	-.66	-.66	-.69	-.76	-.73	-.72	-.74
1.000	-.60	-.64	-.64	-.67	-.74	-.71	-.71	-.74
Lower surface								
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.60	0.63	0.65
0.005	0.90	0.92	0.95	0.95	0.94	0.97	0.98	0.99
.014	1.03	1.05	1.07	1.08	1.08	1.09	1.10	1.11
.049	.86	.88	.90	.91	.92	.93	.93	.95
.073	.74	.77	.79	.80	.82	.82	.83	.84
.098	.65	.68	.70	.71	.73	.73	.74	.75
.152	.51	.53	.55	.56	.58	.58	.59	.61
.251	.31	.33	.34	.35	.37	.37	.38	.39
.300	.22	.24	.25	.27	.28	.28	.29	.30
.351	.15	.16	.18	.22	.20	.20	.21	.22
.403	.09	.10	.11	.12	.14	.14	.14	.16
.449	.03	.04	.05	.06	.07	.07	.08	.09
.500	-.01	-.01	0	.01	.02	.02	.03	.04
.549	-.05	-.04	-.03	-.03	-.02	-.02	-.01	0
.602	-.07	-.06	-.06	-.05	-.04	-.04	-.04	-.03
.649	-.09	-.09	-.09	-.08	-.07	-.08	-.07	-.06
.701	-.12	-.12	-.11	-.10	-.10	-.10	-.10	-.09
.751	-.15	-.15	-.15	-.14	-.14	-.14	-.14	-.12
.801	-.20	-.20	-.19	-.19	-.19	-.19	-.18	-.17
.851	-.26	-.26	-.26	-.26	-.26	-.26	-.25	-.25
.951	-.40	-.42	-.41	-.42	-.44	-.43	-.43	-.43

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Continued

(o) $\alpha_o = 22.2^\circ$

Upper surface

x/c \ M	0.32	0.42	0.52	0.54	0.58	0.61
0	-0.65	-0.74	-0.69	-0.70	-0.73	-0.83
.005	-.61	-.71	-.66	-.67	-.70	-.80
.029	-.62	-.71	-.66	-.67	-.70	-.80
.051	-.61	-.71	-.65	-.67	-.69	-.79
.076	-.60	-.71	-.65	-.67	-.70	-.79
.101	-.61	-.71	-.66	-.67	-.70	-.80
.151	-.62	-.71	-.66	-.68	-.70	-.80
.199	-.62	-.72	-.66	-.68	-.70	-.80
.249	-.62	-.72	-.67	-.68	-.71	-.81
.301	-.62	-.73	-.67	-.69	-.71	-.81
.349	-.63	-.74	-.68	-.69	-.72	-.82
.400	-.64	-.74	-.68	-.69	-.72	-.82
.499	-.65	-.75	-.69	-.71	-.73	-.83
.549	-.66	-.76	-.70	-.71	-.74	-.84
.598	-.66	-.76	-.70	-.71	-.74	-.84
.649	-.67	-.76	-.71	-.72	-.75	-.85
.701	-.66	-.77	-.71	-.72	-.75	-.85
.751	-.67	-.77	-.71	-.72	-.75	-.85
.802	-.66	-.76	-.70	-.71	-.74	-.84
.849	-.66	-.77	-.71	-.72	-.75	-.85
.951	-.64	-.74	-.68	-.70	-.72	-.81
1.000	-.63	-.72	-.67	-.63	-.71	-.81

Lower surface

x/c \ M	0.32	0.42	0.52	0.54	0.58	0.61
0.005	0.83	0.83	0.89	0.89	0.90	0.88
.014	1.02	1.04	1.07	1.07	1.08	1.08
.049	.90	.93	.95	.95	.96	.98
.073	.80	.83	.85	.85	.86	.89
.098	.71	.74	.76	.76	.78	.81
.152	.56	.60	.62	.62	.63	.66
.251	.36	.39	.40	.41	.42	.45
.300	.27	.30	.31	.32	.33	.36
.351	.19	.22	.23	.23	.25	.28
.403	.13	.15	.17	.17	.18	.21
.449	.07	.09	.10	.10	.11	.15
.500	.01	.03	.05	.05	.06	.09
.549	-.02	-.01	.01	.01	.02	.05
.602	-.05	-.04	-.02	-.02	-.01	.01
.649	-.08	-.07	-.06	-.06	-.05	-.02
.701	-.11	-.10	-.09	-.09	-.08	-.06
.751	-.15	-.14	-.13	-.13	-.12	-.10
.801	-.19	-.20	-.18	-.18	-.18	-.16
.851	-.25	-.27	-.25	-.25	-.25	-.24
.951	-.41	-.45	-.43	-.43	-.43	-.45

(p) $\alpha_o = 24.2^\circ$

Upper surface

x/c \ M	0.31	0.42	0.52	0.55	0.58	0.60
0	-0.69	-0.69	-0.77	-0.77	-0.79	-0.79
.005	-.67	-.68	-.75	-.75	-.77	-.76
.029	-.67	-.68	-.75	-.75	-.77	-.76
.051	-.67	-.67	-.75	-.75	-.77	-.76
.076	-.67	-.67	-.75	-.75	-.77	-.76
.101	-.67	-.68	-.75	-.75	-.77	-.77
.151	-.68	-.68	-.76	-.75	-.78	-.77
.199	-.68	-.68	-.76	-.75	-.78	-.77
.249	-.67	-.69	-.77	-.76	-.78	-.78
.301	-.69	-.69	-.77	-.77	-.79	-.78
.349	-.70	-.69	-.78	-.77	-.79	-.79
.400	-.71	-.70	-.78	-.77	-.79	-.79
.499	-.71	-.71	-.79	-.79	-.81	-.80
.549	-.71	-.71	-.80	-.79	-.81	-.81
.598	-.71	-.72	-.80	-.80	-.82	-.81
.649	-.72	-.72	-.80	-.80	-.82	-.81
.701	-.72	-.72	-.81	-.80	-.82	-.81
.751	-.73	-.72	-.81	-.80	-.82	-.81
.802	-.72	-.72	-.80	-.79	-.82	-.81
.849	-.72	-.72	-.80	-.79	-.82	-.81
.951	-.70	-.70	-.78	-.77	-.79	-.79
1.000	-.69	-.68	-.77	-.76	-.79	-.79

Lower surface

x/c \ M	0.31	0.42	0.52	0.55	0.58	0.60
0.005	0.75	0.78	0.79	0.81	0.80	0.83
.014	1.01	1.03	1.05	1.06	1.06	1.08
.049	.94	.96	.99	1.00	1.00	1.01
.073	.85	.87	.90	.91	.92	.93
.098	.76	.79	.82	.83	.84	.84
.152	.62	.65	.68	.69	.70	.70
.251	.41	.44	.47	.48	.49	.49
.300	.32	.35	.38	.39	.40	.40
.351	.24	.27	.30	.30	.32	.32
.403	.18	.20	.23	.23	.25	.24
.449	.11	.13	.16	.16	.18	.17
.500	.06	.08	.10	.11	.12	.12
.549	.02	.04	.05	.06	.07	.07
.602	-.02	0	.02	.02	.04	.03
.649	-.05	-.03	-.02	-.01	0	-.01
.701	-.09	-.07	-.06	-.05	-.04	-.05
.751	-.13	-.11	-.11	-.10	-.09	-.09
.801	-.19	-.17	-.17	-.16	-.15	-.15
.851	-.25	-.24	-.25	-.24	-.23	-.23
.951	-.43	-.42	-.45	-.44	-.45	-.44

NACA

TABLE V.- PRESSURE COEFFICIENTS FOR THE NACA 64A010 AIRFOIL SECTION - Concluded

(q) $\alpha_o = 26.2^\circ$

Upper surface				
x/c \ M	0.32	0.42	0.53	0.55
0	-0.76	-0.77	-0.84	-0.86
.005	-.73	-.76	-.83	-.85
.029	-.74	-.76	-.83	-.85
.051	-.73	-.76	-.83	-.84
.076	-.72	-.75	-.83	-.84
.101	-.74	-.76	-.84	-.85
.151	-.74	-.76	-.84	-.85
.199	-.74	-.76	-.84	-.85
.249	-.74	-.77	-.84	-.86
.301	-.76	-.78	-.85	-.86
.349	-.76	-.78	-.86	-.87
.400	-.77	-.78	-.86	-.88
.499	-.77	-.79	-.88	-.88
.549	-.78	-.80	-.87	-.89
.598	-.78	-.81	-.88	-.90
.649	-.78	-.81	-.88	-.90
.701	-.78	-.82	-.89	-.90
.751	-.78	-.81	-.88	-.90
.802	-.77	-.81	-.88	-.89
.849	-.78	-.81	-.88	-.89
.951	-.77	-.78	-.85	-.86
1.000	-.76	-.78	-.85	-.86

Lower surface				
x/c \ M	0.32	0.42	0.53	0.55
0.005	0.63	0.66	0.68	0.69
.014	.97	.99	1.01	1.03
.049	.98	1.00	1.02	1.03
.073	.90	.92	.95	.96
.098	.83	.85	.88	.89
.152	.69	.71	.75	.75
.251	.49	.50	.54	.55
.300	.40	.41	.45	.46
.351	.32	.33	.37	.37
.403	.24	.26	.30	.30
.449	.18	.19	.23	.23
.500	.12	.13	.17	.17
.549	.07	.08	.12	.12
.602	.04	.04	.07	.07
.649	0	0	.03	.03
.701	-.04	-.04	-.01	-.01
.751	-.09	-.09	-.07	-.07
.801	-.16	-.15	-.13	-.13
.851	-.23	-.24	-.22	-.22
.951	-.44	-.45	-.46	-.46

(r) $\alpha_o = 28.2^\circ$

Upper surface			
x/c \ M	0.32	0.42	0.53
0	-0.87	-0.85	-0.89
.005	-.85	-.84	-.88
.029	-.85	-.84	-.88
.051	-.85	-.84	-.88
.076	-.85	-.84	-.89
.101	-.86	-.84	-.89
.151	-.87	-.85	-.90
.199	-.87	-.85	-.90
.249	-.87	-.86	-.90
.301	-.88	-.87	-.91
.349	-.89	-.87	-.92
.400	-.88	-.87	-.92
.499	-.89	-.89	-.94
.549	-.90	-.89	-.94
.598	-.91	-.89	-.94
.649	-.91	-.89	-.94
.701	-.90	-.90	-.94
.751	-.91	-.89	-.94
.802	-.89	-.88	-.93
.849	-.90	-.88	-.93
.951	-.88	-.86	-.90
1.000	-.88	-.87	-.90

Lower surface			
x/c \ M	0.32	0.42	0.53
0.005	0.49	0.53	0.57
.014	.92	.95	.97
.049	1.01	1.03	1.05
.073	.95	.96	.99
.098	.88	.90	.93
.152	.75	.77	.80
.251	.55	.57	.60
.300	.46	.48	.51
.351	.37	.39	.43
.403	.30	.32	.35
.449	.23	.25	.28
.500	.17	.19	.22
.549	.11	.14	.17
.602	.07	.09	.12
.649	.03	.04	.07
.701	-.02	0	.02
.751	-.08	-.06	-.03
.801	-.15	-.13	-.11
.851	-.24	-.23	-.20
.951	-.48	-.47	-.46

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION

(a) $\alpha_o = -5^o$

Upper surface														
x/c \ M	0.32	0.42	0.51	0.56	0.61	0.64	0.67	0.69	0.72	0.74	0.77	0.80	0.83	0.87
0	-0.28	-0.11	0.01	0.10	0.22	0.29	0.34	0.38	0.44	0.48	0.54	0.61	0.69	0.76
.005	1.01	1.03	1.04	1.06	1.08	1.10	1.11	1.11	1.12	1.13	1.14	1.15	1.17	1.19
.013	.96	1.00	1.00	1.01	1.02	1.02	1.02	1.03	1.04	1.05	1.04	1.05	1.05	1.07
.025	.75	.74	.75	.75	.76	.77	.76	.76	.78	.79	.79	.78	.78	.80
.075	.30	.32	.31	.32	.32	.33	.32	.33	.34	.36	.36	.36	.37	.39
.100	.20	.22	.20	.20	.21	.21	.21	.21	.23	.25	.24	.25	.26	.28
.150	.08	.08	.06	.06	.06	.07	.06	.06	.07	.09	.09	.09	.10	.13
.200	-.03	-.02	-.03	-.05	-.06	-.05	-.05	-.06	-.04	-.04	-.04	-.04	-.03	.01
.250	-.11	-.10	-.13	-.14	-.15	-.14	-.15	-.16	-.15	-.15	-.15	-.15	-.15	-.11
.300	-.16	-.16	-.20	-.20	-.22	-.21	-.23	-.25	-.24	-.24	-.24	-.26	-.25	-.21
.350	-.20	-.20	-.24	-.25	-.27	-.27	-.29	-.31	-.30	-.30	-.32	-.33	-.33	-.29
.400	-.24	-.24	-.29	-.29	-.31	-.32	-.34	-.36	-.36	-.37	-.39	-.43	-.42	-.37
.450	-.27	-.27	-.32	-.33	-.36	-.35	-.39	-.40	-.41	-.42	-.46	-.53	-.55	-.50
.500	-.27	-.27	-.32	-.33	-.35	-.35	-.38	-.41	-.41	-.43	-.47	-.55	-.61	-.57
.550	-.26	-.26	-.31	-.32	-.34	-.34	-.37	-.40	-.39	-.41	-.44	-.52	-.64	-.62
.600	-.26	-.25	-.30	-.31	-.33	-.33	-.36	-.38	-.38	-.39	-.42	-.49	-.66	-.67
.650	-.23	-.23	-.27	-.28	-.30	-.30	-.33	-.35	-.35	-.36	-.39	-.45	-.62	-.73
.700	-.20	-.22	-.24	-.25	-.27	-.27	-.30	-.32	-.31	-.32	-.35	-.42	-.59	-.69
.750	-.18	-.18	-.22	-.23	-.25	-.25	-.27	-.29	-.29	-.29	-.31	-.33	-.47	-.66
.800	-.15	-.16	-.19	-.20	-.21	-.21	-.23	-.25	-.23	-.22	-.23	-.22	-.22	-.63
.850	-.13	-.11	-.14	-.13	-.13	-.12	-.14	-.15	-.13	-.12	-.12	-.13	-.11	-.42
.900	-.02	0	-.02	-.03	-.03	-.02	-.03	-.04	-.02	-.01	-.01	-.01	-.01	-.22
.950	.07	.07	.04	.04	.04	.05	.04	.03	.05	.06	.08	.07	.07	-.07
Lower surface														
x/c \ M	0.32	0.42	0.51	0.56	0.61	0.64	0.67	0.69	0.72	0.74	0.77	0.80	0.83	0.87
0.005	-1.63	-1.44	-1.38	-1.37	-1.33	-1.28	-1.35	-1.48	-1.79	-1.87	-1.76	-1.60	-1.41	-1.25
.013	-1.64	-1.40	-1.34	-1.31	-1.27	-1.23	-1.31	-1.44	-1.83	-1.93	-1.80	-1.63	-1.47	-1.28
.025	-1.61	-1.41	-1.34	-1.30	-1.25	-1.22	-1.31	-1.43	-1.74	-1.81	-1.71	-1.55	-1.38	-1.22
.050	-1.39	-1.34	-1.31	-1.29	-1.24	-1.19	-1.26	-1.34	-1.67	-1.76	-1.64	-1.49	-1.34	-1.18
.075	-1.10	-1.20	-1.27	-1.27	-1.23	-1.18	-1.21	-1.24	-1.58	-1.65	-1.55	-1.42	-1.28	-1.13
.100	-.86	-1.02	-1.17	-1.19	-1.18	-1.15	-1.18	-1.16	-1.43	-1.58	-1.50	-1.37	-1.24	-1.09
.150	-.52	-.65	-.84	-.89	-.98	-1.00	-1.00	-.99	-.97	-1.47	-1.42	-1.31	-1.19	-1.04
.200	-.34	-.39	-.51	-.55	-.66	-.74	-.75	-.77	-.63	-1.20	-1.34	-1.25	-1.13	-.99
.250	-.29	-.30	-.38	-.41	-.49	-.57	-.60	-.64	-.49	-.71	-1.31	-1.24	----	----
.300	-.29	-.28	-.33	-.34	-.37	-.42	-.45	-.49	-.42	-.41	-1.07	-1.23	-1.15	-1.02
.350	-.27	-.25	-.29	-.29	-.30	-.32	-.34	-.39	-.36	-.28	-.56	-1.14	----	----
.400	-.22	-.22	-.25	-.25	-.25	-.25	-.27	-.30	-.30	-.22	-.33	-.72	-1.01	-1.04
.450	-.19	-.18	-.20	-.21	-.21	-.19	-.22	-.24	-.23	-.18	-.20	-.50	----	----
.500	-.15	-.14	-.17	-.17	-.17	-.15	-.17	-.19	-.19	-.15	-.13	-.36	.53	-.93
.550	-.12	-.11	-.13	-.13	-.13	-.12	-.13	-.14	-.13	-.11	-.09	-.23	----	----
.600	-.09	-.08	-.10	-.10	-.09	-.10	-.10	-.11	-.10	-.08	-.05	-.14	-.31	-.62
.700	0	.01	-.01	-.01	0	-.02	-.01	-.02	0	.02	.04	.01	----	----
.750	.03	.04	.02	.02	.03	.02	.03	.02	.04	.06	.07	.06	-.05	-.29
.800	.07	.08	.06	.06	.07	.06	.06	.06	.08	.10	.11	.10	----	----
.850	.09	.09	.08	.08	.07	.08	.08	.08	.10	.12	.13	.13	.07	-.12
.950	.12	.13	.11	.12	.12	.12	.13	.11	.14	.16	.17	.16	.14	.01

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(b) $\alpha_o = -4^\circ$

Upper surface															
x/c \ M	0.32	0.41	0.52	0.56	0.62	0.64	0.66	0.69	0.72	0.74	0.77	0.80	0.82	0.86	0.89
0	-0.33	-0.21	0.08	0.22	0.34	0.38	0.44	0.49	0.54	0.60	0.64	0.70	0.75	0.82	0.85
.005	1.00	1.02	1.06	1.07	1.10	1.10	1.11	1.11	1.12	1.13	1.14	1.16	1.16	1.19	1.20
.013	.94	.96	.97	.97	.99	.98	.98	.99	.99	1.01	1.00	1.01	1.02	1.03	1.14
.025	.66	.67	.68	.68	.70	.69	.69	.70	.70	.92	.72	.73	.73	.74	.76
.075	.24	.23	.24	.24	.26	.24	.35	.25	.26	.38	.29	.29	.32	.33	.36
.100	.14	.13	.14	.14	.15	.13	.14	.14	.15	.27	.17	.19	.20	.22	.25
.150	.01	-.01	0	-.01	.01	-.01	-.01	-.01	0	.02	.02	.03	.04	.07	.11
.200	-.08	-.10	-.10	-.11	-.10	-.12	-.12	-.13	-.12	-.11	-.11	-.10	-.09	-.06	-.02
.250	-.16	-.18	-.18	-.19	-.19	-.21	-.21	-.23	-.22	-.22	-.22	-.22	-.21	-.17	-.13
.300	-.20	-.23	-.24	-.25	-.26	-.28	-.29	-.31	-.30	-.31	-.30	-.32	-.31	-.27	-.23
.350	-.24	-.27	-.28	-.28	-.30	-.34	-.34	-.36	-.36	-.37	-.38	-.39	-.38	-.35	-.30
.400	-.28	-.30	-.32	-.34	-.35	-.38	-.39	-.41	-.42	-.43	-.45	-.48	-.47	-.43	-.38
.450	-.30	-.33	-.35	-.37	-.38	-.42	-.42	-.45	-.46	-.48	-.52	-.59	-.60	-.55	-.50
.500	-.29	-.32	-.34	-.36	-.37	-.40	-.41	-.44	-.45	-.47	-.51	-.61	-.66	-.62	-.57
.550	-.28	-.31	-.33	-.34	-.35	-.39	-.40	-.42	-.43	-.45	-.48	-.56	-.68	-.67	-.62
.600	-.26	-.29	-.31	-.33	-.34	-.37	-.38	-.40	-.41	-.42	-.44	-.51	-.62	-.72	-.67
.650	-.24	-.26	-.28	-.30	-.30	-.36	-.35	-.37	-.37	-.38	-.41	-.48	-.59	-.71	-.71
.700	-.20	-.24	-.25	-.27	-.27	-.30	-.32	-.34	-.34	-.35	-.38	-.42	-.58	-.67	-.67
.750	-.18	-.22	-.23	-.24	-.25	-.27	-.28	-.30	-.30	-.30	-.29	-.25	-.26	-.67	-.66
.800	-.16	-.19	-.20	-.20	-.20	-.21	-.21	-.23	-.21	-.19	-.19	-.19	-.15	-.46	-.59
.850	-.13	-.13	-.11	-.11	-.10	-.12	-.12	-.13	-.12	-.11	-.11	-.11	-.08	-.21	-.39
.900	.02	0	0	-.01	0	-.02	-.02	-.03	-.01	0	.01	.01	.03	-.05	-.24
.950	.08	.06	.07	.06	.07	.06	.06	.05	.08	.09	.09	.10	.11	.08	-.15

Lower surface															
x/c \ M	0.32	0.41	0.52	0.56	0.62	0.64	0.66	0.69	0.72	0.74	0.77	0.80	0.82	0.86	0.89
0.005	-2.88	-2.91	-2.21	-2.01	-1.93	-1.86	-1.82	-1.95	-1.93	-1.81	-1.67	-1.53	-1.40	-1.21	-1.10
.013	-2.18	-2.31	-2.03	-1.84	-1.75	-1.73	-1.77	-1.93	-1.95	-1.82	-1.68	-1.54	-1.43	-1.24	-1.12
.025	-1.30	-1.41	-1.72	-1.70	-1.72	-1.72	-1.73	-1.89	-1.83	-1.73	-1.59	-1.47	-1.36	-1.17	-1.07
.050	-.81	-.87	-1.12	-1.21	-1.29	-1.35	-1.41	-1.67	-1.70	-1.62	-1.52	-1.41	-1.31	-1.15	-1.03
.075	-.60	-.65	-.77	-.87	-.98	-1.07	-1.09	-1.20	-1.58	-1.51	-1.44	-1.34	-1.25	-1.09	-.98
.100	-.50	-.55	-.62	-.68	-.78	-.87	-.90	-.89	-1.29	-1.45	-1.38	-1.29	-1.20	-1.06	-.95
.150	-.39	-.41	-.44	-.45	-.49	-.56	-.58	-.57	-.60	-1.25	-1.29	-1.23	-1.15	-1.01	-.91
.200	-.25	-.30	-.31	-.32	-.33	-.37	-.38	-.40	-.33	-.47	-1.14	-1.13	-1.07	-.93	-.84
.250	-.25	-.28	-.29	-.29	-.29	-.32	-.32	-.33	-.29	-.27	-.76	-1.15	-1.10	----	----
.300	-.27	-.29	-.31	-.31	-.30	-.32	-.33	-.34	-.32	-.26	-.31	-1.11	-1.10	-.99	-.91
.350	-.26	-.27	-.28	-.30	-.27	-.29	-.29	-.30	-.29	-.25	-.21	-.75	-1.07	----	----
.400	-.20	-.23	-.24	-.23	-.23	-.25	-.25	-.26	-.25	-.23	-.18	-.34	-.84	-1.01	-.95
.450	-.17	-.19	-.20	-.19	-.19	-.21	-.20	-.21	-.20	-.18	-.15	-.15	-.49	----	----
.500	-.13	-.15	-.16	-.15	-.15	-.16	-.16	-.17	-.16	-.15	-.12	-.09	-.29	-.83	-.99
.550	-.10	-.11	-.11	-.11	-.10	-.12	-.11	-.12	-.11	-.10	-.08	-.04	-.14	----	----
.600	-.06	-.08	-.08	-.08	-.06	-.08	-.08	-.08	-.07	-.07	-.05	-.01	-.04	-.46	-.95
.700	.04	.02	.02	.02	.03	.02	.03	.03	.04	.04	.06	.07	.09	----	----
.750	.07	.05	.05	.05	.07	.06	.06	.06	.08	.08	.09	.11	.12	-.09	-.66
.800	.11	.12	.11	.10	.11	.10	.11	.10	.12	.12	.13	.14	.16	----	----
.850	.13	.13	.12	.12	.13	.12	.13	.13	.14	.14	.15	.16	.18	.06	-.34
.950	.15	.15	.15	.15	.16	.16	.16	.16	.17	.18	.19	.19	.20	.15	-.11

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(c) $\alpha_o = -3^\circ$

Upper surface															
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.72	0.74	0.76	0.79	0.82	0.85	0.89
0	0.21	0.25	0.36	0.43	0.51	0.54	0.59	0.63	0.67	0.73	0.77	0.80	0.84	0.86	0.90
.005	1.01	1.02	1.04	1.08	1.08	1.08	1.10	1.11	1.11	1.13	1.15	1.15	1.16	1.17	1.19
.013	.86	.86	.88	.90	.90	.90	.91	.91	.91	.93	.94	.94	.95	.97	1.00
.025	.53	.54	.56	.57	.58	.57	.58	.59	.60	.61	.63	.63	.65	.67	.71
.075	.11	.11	.13	.14	.14	.14	.14	.14	.16	.17	.19	.19	.21	.24	.30
.100	.02	.01	.04	.04	.04	.03	.04	.04	.05	.06	.08	.09	.11	.13	.20
.150	-.09	-.10	-.10	-.10	-.10	-.11	-.11	-.11	-.10	-.09	-.08	-.07	-.06	-.02	.05
.200	-.18	-.19	-.18	-.19	-.20	-.21	-.21	-.22	-.21	-.21	-.21	-.19	-.18	-.14	-.07
.250	-.23	-.25	-.25	-.24	-.28	-.29	-.30	-.31	-.31	-.31	-.31	-.31	-.29	-.26	-.18
.300	-.28	-.30	-.30	-.32	-.34	-.36	-.37	-.39	-.39	-.40	-.41	-.40	-.39	-.36	-.28
.350	-.30	-.33	-.34	-.36	-.38	-.40	-.42	-.43	-.44	-.45	-.47	-.47	-.46	-.43	-.35
.400	-.34	-.36	-.37	-.39	-.41	-.44	-.45	-.48	-.49	-.51	-.55	-.55	-.55	-.51	-.43
.450	-.36	-.38	-.39	-.41	-.44	-.46	-.48	-.51	-.52	-.56	-.63	-.67	-.67	-.63	-.54
.500	-.34	-.36	-.37	-.40	-.41	-.45	-.46	-.49	-.50	-.53	-.59	-.70	-.73	-.70	-.62
.550	-.33	-.35	-.35	-.38	-.40	-.43	-.43	-.46	-.48	-.50	-.55	-.64	-.77	-.74	-.66
.600	-.30	-.33	-.34	-.35	-.37	-.39	-.41	-.43	-.43	-.46	-.50	-.59	-.71	-.72	-.67
.650	-.28	-.30	-.30	-.32	-.34	-.36	-.37	-.39	-.40	-.42	-.47	-.57	-.69	-.69	-.64
.700	-.25	-.27	-.27	-.29	-.30	-.33	-.35	-.36	-.37	-.39	-.40	-.33	-.68	-.69	-.63
.750	-.22	-.24	-.24	-.25	-.27	-.29	-.29	-.30	-.29	-.27	-.26	-.24	-.36	-.64	-.61
.800	-.20	-.20	-.18	-.19	-.18	-.19	-.19	-.20	-.19	-.20	-.21	-.20	-.12	-.34	-.41
.850	-.12	-.11	-.09	-.10	-.11	-.13	-.12	-.14	-.11	-.11	-.12	-.10	-.05	-.13	-.25
.900	.01	-.01	.01	-.01	0	-.01	-.01	-.02	0	.01	.01	.02	.06	.01	-.13
.950	.07	.06	.08	.08	.07	.07	.07	.07	.09	.10	.10	.12	.14	.11	-.04

Lower surface															
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.66	0.69	0.72	0.74	0.76	0.79	0.82	0.85	0.89
0.005	-2.11	-2.30	-2.33	-2.36	-2.18	-2.09	-1.96	-1.83	-1.71	-1.65	-1.50	-1.38	-1.27	-1.17	-1.02
.013	-1.60	-1.63	-1.84	-1.87	-1.82	-1.70	-1.82	-1.81	-1.70	-1.66	-1.53	-1.40	-1.30	-1.20	-1.05
.025	-.96	-1.03	-1.08	-1.36	-1.68	-1.66	-1.65	-1.72	-1.61	-1.53	-1.43	-1.32	-1.22	-1.14	-.99
.050	-.61	-.67	-.68	-.70	-.73	-.80	-.94	-1.37	-1.42	-1.39	-1.34	-1.27	-1.19	-1.11	-.96
.075	-.46	-.50	-.51	-.52	-.54	-.56	-.57	-.60	-.80	-1.25	-1.22	-1.19	-1.11	-1.05	-.91
.100	-.39	-.42	-.43	-.44	-.46	-.48	-.49	-.49	-.49	-.82	-1.17	-1.14	-1.08	-1.01	-.88
.150	-.30	-.33	-.33	-.34	-.36	-.37	-.38	-.39	-.36	-.33	-.73	-1.03	-1.03	-.97	-.85
.200	-.13	-.19	-.21	-.23	-.25	-.27	-.28	-.29	-.28	-.25	-.20	-.82	-.94	----	-.79
.250	-.20	-.23	-.22	-.26	-.25	-.26	-.26	-.27	-.26	-.25	-.20	-.33	-.93	----	----
.300	-.23	-.25	-.25	-.26	-.27	-.29	-.29	-.30	-.29	-.29	-.26	-.19	-.80	-.95	-.84
.350	-.21	-.23	-.23	-.24	-.25	-.26	-.27	-.27	-.27	-.27	-.26	-.21	-.43	----	----
.400	-.18	-.20	-.19	-.20	-.21	-.22	-.22	-.23	-.23	-.22	-.22	-.19	-.17	-.91	-.89
.450	-.14	-.17	-.15	-.16	-.17	-.18	-.18	-.19	-.18	-.18	-.17	-.17	-.09	----	----
.500	-.11	-.13	-.12	-.13	-.13	-.14	-.14	-.15	-.14	-.13	-.13	-.12	-.06	-.45	-.92
.550	-.08	-.09	-.08	-.08	-.08	-.09	-.10	-.10	-.09	-.08	-.08	-.07	-.03	----	----
.600	-.04	-.06	-.05	-.06	-.05	-.04	-.05	-.05	-.04	-.04	-.05	-.03	0	-.11	-.84
.700	.05	.04	.04	.04	.05	.06	.05	.05	.06	.07	.06	.08	.10	----	----
.750	.08	.07	.08	.07	.09	.09	.09	.09	.10	.10	.10	.11	.13	.13	-.44
.800	.13	.12	.15	.12	.13	.14	.13	.13	.15	.15	.14	.16	.18	----	----
.850	.13	.13	.15	.13	.15	.16	.15	.15	.17	.17	.16	.18	.19	.19	-.09
.950	.16	.15	.17	.16	.18	.18	.18	.18	.20	.19	.19	.20	.21	.20	.05

NACA

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(d) $\alpha_o = -2^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.67	0.69	0.71	0.74	0.76	0.79	0.82	0.84	0.88	0.90
0	0.63	0.67	0.70	0.73	0.76	0.78	0.80	0.82	0.84	0.87	0.89	0.91	0.93	0.93	0.96	0.98
.005	.96	1.01	1.04	1.05	1.06	1.07	1.07	1.09	1.09	1.10	1.11	1.12	1.13	1.14	1.17	1.18
.013	.69	.93	.95	.77	.79	.79	.80	.81	.82	.84	.84	.85	.88	.90	.95	.96
.025	.34	.38	.40	.41	.43	.44	.45	.45	.47	.49	.50	.51	.55	.58	.64	.66
.075	-.04	-.02	-.02	-.01	.01	-.01	.01	.01	.03	.04	.05	.07	.11	.15	.23	.26
.100	-.12	-.11	-.10	-.10	-.09	-.11	-.09	-.09	-.08	-.07	-.06	-.04	0	.04	.12	.16
.150	-.20	-.21	-.20	-.21	-.21	-.23	-.21	-.22	-.22	-.21	-.20	-.19	-.15	-.11	-.03	.01
.200	-.27	-.28	-.28	-.29	-.29	-.32	-.31	-.32	-.32	-.31	-.31	-.30	-.27	-.23	-.14	-.10
.250	-.33	-.34	-.34	-.36	-.36	-.40	-.38	-.40	-.41	-.41	-.43	-.41	-.39	-.34	-.25	-.21
.300	-.36	-.38	-.39	-.40	-.41	-.45	-.44	-.47	-.49	-.50	-.51	-.51	-.47	-.43	-.34	-.30
.350	-.38	-.40	-.42	-.43	-.45	-.49	-.48	-.51	-.53	-.55	-.58	-.57	-.55	-.51	-.43	-.38
.400	-.40	-.42	-.44	-.46	-.47	-.52	-.51	-.55	-.58	-.61	-.65	-.66	-.62	-.58	-.50	-.46
.450	-.41	-.43	-.45	-.48	-.49	-.53	-.53	-.58	-.60	-.65	-.76	-.77	-.73	-.69	-.60	-.55
.500	-.39	-.42	-.43	-.45	-.47	-.50	-.50	-.54	-.57	-.60	-.71	-.84	-.81	-.76	-.67	-.63
.550	-.37	-.39	-.40	-.42	-.44	-.48	-.47	-.51	-.52	-.56	-.66	-.80	-.83	-.80	-.71	-.67
.600	-.35	-.37	-.38	-.39	-.40	-.44	-.44	-.47	-.48	-.51	-.61	-.75	-.77	-.74	-.66	-.69
.650	-.31	-.33	-.34	-.36	-.37	-.41	-.40	-.43	-.45	-.48	-.49	-.74	-.76	-.73	-.65	-.69
.700	-.28	-.30	-.31	-.33	-.35	-.38	-.37	-.40	-.40	-.37	-.31	-.49	-.77	-.74	-.66	-.68
.750	-.25	-.27	-.29	-.27	-.26	-.28	-.26	-.27	-.27	-.27	-.29	-.22	-.50	-.58	-.51	-.66
.800	-.20	-.18	-.18	-.19	-.20	-.22	-.20	-.22	-.22	-.22	-.22	-.17	-.21	-.35	-.35	-.55
.850	-.11	-.10	-.11	-.12	-.12	-.14	-.12	-.13	-.13	-.13	-.12	-.10	-.07	-.19	-.23	-.43
.900	-.02	-.01	-.01	-.02	-.01	-.03	-.01	-.01	-.01	0	0	.02	.04	-.07	-.14	-.35
.950	.05	.06	.07	.07	.08	.07	.09	.08	.09	.10	.11	.11	.12	.03	-.05	-.27

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.64	0.67	0.69	0.71	0.74	0.76	0.79	0.82	0.84	0.88	0.90
0.005	-1.29	-1.35	-1.49	-1.50	-1.44	-1.41	-1.36	-1.38	-1.38	-1.35	-1.28	-1.18	-1.10	-1.04	-0.94	-0.85
.013	-.92	-.99	-1.09	-1.13	-1.26	-1.37	-1.35	-1.35	-1.32	-1.28	-1.29	-1.20	-1.12	-1.07	-.98	-.89
.025	-.68	-.71	-.77	-.81	-.89	-.91	-.92	-1.03	-1.17	-1.16	-1.14	-1.11	-1.05	-1.01	-.91	-.83
.050	-.46	-.48	-.49	-.51	-.52	-.54	-.53	-.58	-.74	-.92	-.99	-.99	-1.01	-.98	-.90	-.81
.075	-.33	-.35	-.37	-.39	-.39	-.42	-.41	-.43	-.41	-.40	-.73	-.89	-.95	-.93	-.85	-.77
.100	-.28	-.30	-.31	-.33	-.33	-.35	-.35	-.37	-.36	-.35	-.34	-.81	-.89	-.91	-.83	-.75
.150	-.22	-.24	-.24	-.25	-.26	-.28	-.28	-.29	-.30	-.29	-.29	-.25	-.79	-.87	-.80	-.72
.200	-.15	-.18	-.19	-.15	-.17	-.19	-.19	-.21	-.21	-.22	-.23	-.21	-.40	-.79	-.73	-.66
.250	-.15	-.17	-.17	-.19	-.19	-.21	-.20	-.22	-.22	-.22	-.23	-.22	-.19	-.81	----	----
.300	-.18	-.19	-.19	-.21	-.21	-.23	-.21	-.24	-.23	-.24	-.26	-.27	-.22	-.75	-.80	-.73
.350	-.16	-.18	-.18	-.19	-.20	-.21	-.21	-.22	-.22	-.23	-.24	-.24	-.24	-.59	----	----
.400	-.14	-.15	-.14	-.16	-.16	-.18	-.17	-.19	-.18	-.19	-.20	-.21	-.21	-.33	-.84	-.79
.450	-.11	-.12	-.11	-.13	-.13	-.15	-.13	-.15	-.15	-.15	-.15	-.17	-.17	-.17	----	----
.500	-.09	-.10	-.09	-.10	-.10	-.11	-.10	-.11	-.11	-.11	-.11	-.13	-.13	-.11	-.79	-.80
.550	-.05	-.06	-.05	-.06	-.06	-.07	-.06	-.07	-.06	-.06	-.06	-.07	-.08	-.05	----	----
.600	-.02	-.02	-.01	-.03	-.04	-.03	-.02	-.03	-.02	-.02	-.02	-.02	-.03	-.01	-.54	-.77
.700	.07	.06	.08	.06	.08	.07	.08	.08	.08	.08	.09	.09	.09	.09	----	----
.750	.10	.09	.11	.09	.10	.10	.11	.11	.12	.12	.12	.13	.12	.12	.01	-.69
.800	.13	.14	.14	.13	.15	.15	.15	.15	.16	.16	.16	.17	.16	.16	----	----
.850	.14	.15	.16	.14	.16	.16	.17	.17	.17	.17	.18	.18	.18	.16	.13	-.52
.950	.16	.16	.18	.17	.18	.18	.19	.19	.20	.20	.20	.21	.19	.15	.12	-.33

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TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(e) $\alpha_o = 0^o$

Upper surface																	
x/c \ M	0.32	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.74	0.77	0.79	0.82	0.84	0.87	0.90	0.93
0	0.96	1.03	1.05	1.07	1.08	1.08	1.07	1.10	1.10	1.11	1.12	1.12	1.11	1.09	1.08	1.09	1.10
.005	.66	.71	.73	.76	.78	.79	.80	.83	.85	.87	.91	.97	.92	1.08	1.11	1.14	1.15
.013	.27	.33	.32	.36	.39	.39	.42	.44	.47	.50	.54	.61	.69	.76	.82	.86	.88
.025	-.07	-.02	-.04	-.02	.02	.02	.03	.05	.08	.11	.27	.44	.33	.41	.48	.54	.57
.075	-.32	-.29	-.35	-.34	-.33	-.34	-.33	-.32	-.32	-.30	-.25	-.19	-.10	-.03	.06	.13	.16
.100	-.36	-.34	-.39	-.39	-.38	-.40	-.40	-.40	-.39	-.38	-.34	-.28	-.20	-.13	-.05	.03	.07
.150	-.40	-.41	-.46	-.47	-.48	-.49	-.49	-.49	-.49	-.49	-.45	-.40	-.32	-.26	-.18	-.10	-.07
.200	-.43	-.45	-.51	-.52	-.53	-.55	-.55	-.56	-.58	-.59	-.56	-.50	-.42	-.36	-.29	-.21	-.17
.250	-.46	-.49	-.55	-.56	-.58	-.61	-.61	-.63	-.66	-.60	-.65	-.61	-.53	-.47	-.39	-.32	-.28
.300	-.48	-.51	-.57	-.59	-.61	-.64	-.65	-.68	-.71	-.75	-.73	-.68	-.61	-.55	-.47	-.39	-.35
.350	-.49	-.52	-.58	-.60	-.62	-.66	-.67	-.71	-.75	-.82	-.80	-.75	-.68	-.63	-.55	-.47	-.43
.400	-.50	-.52	-.58	-.61	-.63	-.67	-.68	-.72	-.77	-.86	-.87	-.83	-.76	-.70	-.62	-.54	-.50
.450	-.49	-.52	-.59	-.61	-.63	-.67	-.67	-.73	-.78	-.93	-.97	-.94	-.87	-.81	-.72	-.64	-.59
.500	-.46	-.49	-.55	-.57	-.59	-.62	-.63	-.67	-.72	-.85	-.97	-.97	-.90	-.85	-.78	-.71	-.66
.550	-.43	-.45	-.51	-.53	-.55	-.58	-.58	-.62	-.67	-.80	-.91	-.91	-.85	-.81	-.75	-.72	-.71
.600	-.40	-.42	-.48	-.50	-.51	-.54	-.54	-.57	-.60	-.68	-.91	-.90	-.84	-.79	-.72	-.68	-.75
.650	-.36	-.38	-.44	-.46	-.47	-.50	-.48	-.47	-.44	-.39	-.75	-.89	-.82	-.79	-.73	-.68	-.77
.700	-.33	-.34	-.36	-.36	-.35	-.35	-.35	-.37	-.37	-.36	-.35	-.64	-.65	-.65	-.66	-.67	-.77
.750	-.26	-.25	-.29	-.30	-.30	-.31	-.31	-.32	-.31	-.31	-.23	-.37	-.45	-.47	-.50	-.57	-.76
.800	-.19	-.20	-.23	-.23	-.23	-.24	-.24	-.24	-.24	-.23	-.16	-.21	-.33	-.37	-.40	-.44	-.73
.850	-.12	-.12	-.16	-.15	-.15	-.15	-.14	-.14	-.14	-.12	-.08	-.10	-.21	-.29	-.33	-.36	-.67
.900	-.03	-.02	-.04	-.03	-.03	-.02	-.02	-.01	-.01	0	.03	0	-.11	-.22	-.27	-.31	-.63
.950	.06	.06	.05	.06	.07	.07	.08	.10	.10	.10	.11	.08	-.03	-.15	-.21	-.26	-.57
Lower surface																	
x/c \ M	0.32	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.74	0.77	0.79	0.82	0.84	0.87	0.90	0.93
0.005	-0.09	-0.10	-0.12	-0.12	-0.13	-0.14	-0.14	-0.15	-0.17	-0.19	-0.24	-0.38	-0.54	-0.68	-0.69	-0.65	-0.61
.013	-.12	-.12	-.15	-.15	-.15	-.17	-.16	-.18	-.20	-.21	-.25	-.35	-.49	-.62	-.69	-.66	-.63
.025	-.14	-.14	-.17	-.17	-.18	-.19	-.20	-.20	-.22	-.24	-.27	-.37	-.48	-.57	-.58	-.57	-.53
.050	-.11	-.11	-.14	-.14	-.14	-.15	-.15	-.17	-.18	-.19	-.22	-.28	-.40	-.61	-.65	-.61	-.56
.075	-.09	-.09	-.11	-.11	-.12	-.13	-.13	-.14	-.15	-.15	-.18	-.22	-.31	-.50	-.64	-.61	-.57
.100	-.07	-.07	-.09	-.09	-.09	-.10	-.10	-.11	-.12	-.13	-.14	-.19	-.25	-.43	-.61	-.60	-.55
.150	-.06	-.07	-.09	-.08	-.08	-.09	-.09	-.09	-.10	-.11	-.12	-.15	-.20	-.26	-.55	-.56	-.52
.200	-.06	-.06	-.07	-.08	-.08	-.09	-.09	-.09	-.10	-.11	-.12	-.14	-.19	-.22	-.49	-.55	-.51
.250	-.05	-.06	-.06	-.07	-.07	-.08	-.08	-.08	-.09	-.09	-.10	----	----	----	----	----	----
.300	-.07	-.07	-.09	-.09	-.09	-.10	-.10	-.10	-.11	-.12	-.12	-.15	-.20	-.27	-.39	-.57	-.53
.350	-.07	-.08	-.09	-.09	-.09	-.10	-.10	-.10	-.12	-.12	-.13	----	----	----	----	----	----
.400	-.06	-.06	-.08	-.08	-.08	-.08	-.09	-.09	-.10	-.10	-.11	-.14	-.17	-.25	-.32	-.61	-.58
.450	-.05	-.04	-.06	-.06	-.06	-.06	-.06	-.06	-.07	-.07	-.08	----	----	----	----	----	----
.500	-.02	-.03	-.04	-.04	-.04	-.04	-.04	-.04	-.05	-.05	-.05	-.07	-.10	-.15	-.18	-.60	-.59
.550	0	0	-.02	-.01	-.01	-.01	-.01	-.01	-.02	-.01	-.01	----	----	----	----	----	----
.600	.03	.03	.01	.02	.02	.03	-.03	.04	.04	.04	.04	.03	-.01	-.05	-.05	-.56	-.61
.700	.10	.12	.11	.11	.12	.12	.13	.13	.13	.13	.13	----	----	----	----	----	----
.750	.13	.14	.14	.14	.14	.15	.15	.15	.16	.16	.16	.16	.12	.08	.08	-.24	-.54
.800	.16	.16	.16	.16	.17	.18	.19	.19	.19	.20	.20	----	----	----	----	----	----
.850	.17	.17	.17	.17	.18	.19	.19	.20	.20	.21	.21	.19	.16	.11	.10	.02	-.45
.950	.17	.17	.16	.17	.19	.19	.20	.20	.20	.21	.21	.17	.12	.05	.01	-.11	-.30

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TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(f) $\alpha_o = 2^o$

Upper surface																
x/c \ M	0.32	0.42	0.51	0.56	0.61	0.64	0.66	0.70	0.72	0.74	0.77	0.80	0.83	0.85	0.88	0.90
0	0.92	0.93	0.98	0.99	1.02	1.04	1.05	1.08	1.09	1.11	1.14	1.16	1.18	1.17	1.19	1.19
.005	-.08	-.08	-.03	.01	.06	.12	.16	.24	.30	.42	.57	.71	.83	.91	.99	1.02
.013	-.37	-.39	-.35	-.33	-.40	-.15	-.20	-.13	-.06	.05	.20	.33	.46	.55	.65	.70
.025	-.61	-.64	-.64	-.64	-.64	-.60	-.57	-.51	-.44	-.35	-.19	-.05	-.09	.19	.30	.34
.075	-.67	-.70	-.74	-.78	-.81	-.80	-.82	-.79	-.76	-.69	-.56	-.43	-.31	-.22	-.10	-.05
.100	-.66	-.69	-.72	-.76	-.81	-.81	-.83	-.83	-.81	-.75	-.63	-.51	-.39	-.30	-.20	-.14
.150	-.64	-.68	-.74	-.77	-.83	-.83	-.86	-.88	-.88	-.83	-.72	-.62	-.51	-.43	-.32	-.26
.200	-.64	-.67	-.72	-.75	-.82	-.84	-.87	-.91	-.90	-.88	-.78	-.68	-.57	-.49	-.39	-.34
.250	-.64	-.68	-.74	-.77	-.85	-.87	-.91	-.99	-.99	-.95	-.86	-.78	-.67	-.60	-.50	-.45
.300	-.65	-.69	-.74	-.77	-.85	-.87	-.93	-1.02	-1.04	-1.01	-.93	-.84	-.74	-.67	-.58	-.53
.350	-.63	-.67	-.73	-.77	-.84	-.86	-.92	-1.06	-1.09	-1.07	-1.00	-.92	-.81	-.74	-.65	-.59
.400	-.62	-.66	-.73	-.75	-.82	-.84	-.89	-1.02	-1.15	-1.13	-1.05	-.98	-.88	-.81	-.71	-.67
.450	-.61	-.64	-.71	-.74	-.81	-.82	-.86	-.97	-1.18	-1.17	-1.07	-1.00	-.92	-.88	-.80	-.75
.500	-.57	-.60	-.66	-.68	-.74	-.76	-.79	-.90	-1.09	-1.13	-1.03	-.96	-.89	-.85	-.85	-.81
.550	-.53	-.56	-.61	-.63	-.69	-.69	-.72	-.75	-.95	-1.10	-1.02	-.95	-.89	-.85	-.83	-.84
.600	-.49	-.51	-.56	-.56	-.61	-.60	-.59	-.58	-.59	-.95	-.91	-.83	-.81	-.82	-.80	-.82
.650	-.43	-.43	-.46	-.46	-.50	-.49	-.49	-.49	-.43	-.61	-.69	-.67	-.66	-.72	-.81	-.83
.700	-.34	-.37	-.41	-.41	-.44	-.43	-.42	-.42	-.37	-.41	-.54	-.56	-.56	-.61	-.77	-.82
.750	-.30	-.32	-.34	-.34	-.37	-.35	-.34	-.35	-.31	-.27	-.38	-.47	-.48	-.52	-.67	-.79
.800	-.24	-.25	-.27	-.26	-.29	-.26	-.26	-.25	-.23	-.19	-.27	-.38	-.42	-.47	-.57	-.70
.850	-.15	-.15	-.17	-.16	-.17	-.15	-.15	-.14	-.13	-.09	-.17	-.31	-.36	-.43	-.51	-.62
.900	-.05	-.05	-.05	-.04	-.05	-.03	-.03	-.02	-.01	-.01	-.10	-.23	-.31	-.39	-.47	-.56
.950	.04	.05	.05	.06	.06	.08	.07	.09	.09	.08	-.03	-.17	-.25	-.35	-.43	-.52
Lower surface																
x/c \ M	0.32	0.42	0.51	0.56	0.61	0.64	0.66	0.70	0.72	0.74	0.77	0.80	0.83	0.85	0.88	0.90
0.005	0.70	0.72	0.73	0.74	0.74	0.74	0.74	0.72	0.70	0.63	0.50	0.33	0.18	0.01	-0.14	-0.19
.013	.45	.48	.49	.50	.50	.51	.50	.49	.46	.41	.31	.17	.07	-.06	-.17	-.20
.025	.31	.33	.34	.35	.34	.35	.35	.34	.33	.28	.19	.07	-.01	-.14	-.24	-.26
.050	.18	.19	.19	.20	.20	.21	.20	.20	.19	.16	.10	.01	-.06	-.15	-.26	-.30
.075	.13	.14	.14	.15	.14	.15	.15	.15	.14	.11	.07	-.01	-.07	-.14	-.23	-.27
.100	.11	.12	.12	.13	.13	.14	.14	.14	.13	.10	.06	0	-.05	-.12	-.20	-.22
.150	.08	.09	.09	.10	.09	.10	.10	.10	.09	.07	.04	-.02	-.06	-.12	-.18	-.20
.200	.12	.12	.12	.12	.06	.07	.07	.07	.06	.05	.01	-.05	-.09	-.15	-.21	-.23
.250	.07	.08	.07	.08	.08	.09	.08	.09	.09	.06	.03	-.02	-.06	----	-----	-----
.300	.02	.03	.02	.02	.02	.04	.03	.03	.02	.01	-.03	-.08	-.12	-.19	-.26	-.27
.350	0	.01	0	.01	-.02	.01	.01	.01	0	-.02	-.05	-.11	-.15	----	-----	-----
.400	.01	.02	.01	.02	0	.02	.01	.01	.01	-.01	-.05	-.10	-.14	-.21	-.34	-.39
.450	.02	.02	.02	.02	.01	.03	.02	.03	.02	0	-.03	-.08	-.11	----	-----	-----
.500	.03	.03	.03	.04	.02	.04	.04	.04	.03	.02	-.01	-.06	-.10	-.16	-.25	-.38
.550	.05	.05	.05	.06	.05	.06	.06	.07	.06	.05	.01	-.03	-.06	----	-----	-----
.600	.07	.07	.07	.08	.06	.08	.08	.09	.08	.07	.04	0	-.04	-.07	-.08	-.17
.700	.13	.13	.13	.14	.13	.15	.15	.16	.16	.15	.13	.09	.07	----	-----	-----
.750	.13	.14	.14	.16	.15	.17	.17	.18	.18	.17	.15	.11	.09	.07	.05	.06
.800	.17	.18	.18	.19	.18	.21	.21	.21	.22	.20	.18	.14	.11	----	-----	-----
.850	.18	.19	.18	.20	.19	.21	.21	.22	.22	.21	.17	.13	.10	.08	.07	.07
.950	.16	.17	.17	.18	.17	.19	.19	.20	.20	.18	.12	.05	0	-.05	-.06	-.07

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TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(g) $\alpha_0 = 4^\circ$

Upper surface																
x/c \ M	0.32	0.42	0.51	0.54	0.57	0.59	0.61	0.64	0.67	0.69	0.72	0.74	0.77	0.80	0.83	0.86
0	0.22	0.31	0.41	0.46	0.50	0.53	0.57	0.63	0.69	0.77	0.89	0.99	1.08	1.14	1.17	1.19
.005	-1.19	-1.11	-1.09	-1.02	-.94	-.91	-.83	-.71	-.59	-.46	-.23	-.01	.21	.40	.56	.70
.013	-1.19	-1.17	-1.21	-1.17	-1.12	-1.11	-1.04	-.93	-.83	-.71	-.51	-.31	-.13	.06	.21	.34
.025	-1.22	-1.22	-1.35	-1.34	-1.34	-1.38	-1.37	-1.28	-1.18	-1.05	-.86	-.68	-.50	-.31	-.17	-.03
.075	-1.01	-1.01	-1.14	-1.16	-1.17	-1.25	-1.29	-1.39	-1.43	-1.34	-1.15	-.98	-.83	-.64	-.53	-.39
.100	-.93	-.93	-1.05	-1.06	-1.07	-1.15	-1.19	-1.29	-1.39	-1.32	-1.16	-1.01	-.88	-.70	-.58	-.46
.150	-.87	-.87	-.99	-.99	-1.01	-1.07	-1.10	-1.18	-1.37	-1.35	-1.21	-1.08	-.96	-.79	-.69	-.56
.200	-.81	-.79	-.91	-.92	-.93	-.99	-1.02	-1.09	-1.31	-1.36	-1.23	-1.11	-.99	-.84	-.74	-.63
.250	-.79	-.79	-.89	-.91	-.91	-.98	-1.01	-1.09	-1.25	-1.42	-1.31	-1.20	-1.09	-.92	-.84	-.72
.300	-.76	-.76	-.87	-.87	-.88	-.94	-.98	-1.05	-1.18	-1.45	-1.35	-1.24	-1.13	-.98	-.89	-.78
.350	-.74	-.73	-.85	-.84	-.86	-.91	-.95	-1.00	-1.11	-1.43	-1.36	-1.26	-1.16	-1.02	-.95	-.84
.400	-.71	-.69	-.80	-.80	-.81	-.86	-.89	-.94	-.99	-1.35	-1.32	-1.22	-1.13	-1.01	-.96	-.89
.450	-.70	-.67	-.78	-.78	-.79	-.83	-.85	-.89	-.91	-1.32	-1.30	-1.20	-1.12	-1.00	-.96	-.93
.500	-.63	-.61	-.71	-.70	-.71	-.74	-.75	-.78	-.80	-.92	-1.20	-1.08	-1.00	-.93	-.93	-.91
.550	-.57	-.55	-.64	-.63	-.63	-.67	-.68	-.70	-.70	-.63	-.91	-.88	-.84	-.80	-.86	-.90
.600	-.53	-.50	-.59	-.58	-.57	-.60	-.61	-.62	-.63	-.55	-.67	-.70	-.71	-.68	-.74	-.86
.650	-.43	-.41	-.49	-.48	-.47	-.50	-.50	-.51	-.52	-.45	-.50	-.58	-.62	-.60	-.65	-.77
.700	-.38	-.35	-.42	-.41	-.39	-.42	-.42	-.43	-.43	-.39	-.38	-.47	-.56	-.55	-.59	-.70
.750	-.32	-.29	-.35	-.33	-.32	-.33	-.33	-.33	-.34	-.31	-.28	-.37	-.49	-.50	-.55	-.63
.800	-.24	-.21	-.26	-.25	-.23	-.25	-.25	-.24	-.25	-.23	-.19	-.29	-.42	-.45	-.51	-.58
.850	-.15	-.11	-.15	-.14	-.13	-.13	-.14	-.13	-.13	-.12	-.11	-.21	-.36	-.40	-.48	-.55
.900	-.07	-.04	-.05	-.05	-.02	-.04	-.04	-.02	-.03	-.02	-.05	-.16	-.29	-.36	-.44	-.52
.950	.04	.06	.04	.05	.07	.06	.05	.07	.06	.07	.02	-.10	-.24	-.31	-.41	-.49
Lower surface																
x/c \ M	0.32	0.42	0.51	0.54	0.57	0.59	0.61	0.64	0.67	0.69	0.72	0.74	0.77	0.80	0.83	0.86
0.005	1.00	1.02	1.03	1.04	1.04	1.04	1.04	1.05	1.04	1.04	0.99	0.94	0.85	0.75	0.63	0.53
.013	.84	.85	.85	.86	.86	.86	.86	.85	.84	.83	.78	.71	.61	.53	.43	.34
.025	.65	.66	.67	.68	.68	.68	.68	.68	.67	.66	.61	.55	.46	.40	.29	.23
.050	.43	.44	.44	.45	.46	.46	.45	.46	.45	.45	.41	.36	.29	.25	.17	.12
.075	.33	.34	.35	.35	.36	.36	.36	.36	.36	.36	.33	.28	.23	.19	.12	.08
.100	.29	.30	.30	.31	.32	.32	.32	.32	.32	.32	.29	.25	.20	.17	.10	.07
.150	.23	.23	.24	.25	.25	.25	.25	.26	.25	.26	.23	.19	.15	.12	.07	.04
.200	.18	.19	.19	.19	.20	.20	.20	.21	.20	.21	.18	.15	.11	.08	.02	-.01
.250	.17	.19	.19	.20	.21	.20	.20	.21	.20	.21	.19	.15	----	----	----	----
.300	.11	.13	.12	.13	.14	.13	.14	.14	.13	.14	.12	.08	.03	.01	-.05	-.08
.350	.09	.10	.09	.10	.11	.10	.10	.11	.10	.11	.08	.05	----	----	----	----
.400	.08	.09	.09	.09	.10	.09	.10	.10	.09	.10	.08	.04	-.01	-.03	-.09	-.14
.450	.08	.09	.08	.09	.10	.09	.09	.10	.09	.10	.08	.04	----	----	----	----
.500	.09	.09	.09	.09	.10	.09	.10	.10	.10	.11	.08	.05	.01	-.02	-.07	-.10
.550	.10	.11	.10	.11	.12	.11	.11	.12	.11	.12	.10	.07	----	----	----	----
.600	.11	.12	.11	.12	.13	.12	.13	.13	.13	.13	.11	.08	.05	.04	-.01	-.04
.700	.15	.16	.16	.16	.18	.17	.18	.18	.18	.19	.17	.14	----	----	----	----
.750	.17	.17	.17	.17	.19	.18	.19	.19	.19	.21	.18	.15	.12	.11	.08	.08
.800	.18	.21	.20	.20	.22	.21	.21	.22	.22	.23	.20	.18	----	----	----	----
.850	.19	.20	.19	.20	.22	.21	.21	.22	.21	.23	.20	.17	.14	.13	.09	.07
.950	.15	.17	.16	.16	.18	.17	.17	.18	.18	.19	.15	.09	.03	-.01	-.06	-.07

NACA

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(h) $\alpha_o = 6^o$

Upper surface															
x/c \ M	0.32	0.42	0.52	0.54	0.57	0.59	0.62	0.64	0.67	0.70	0.73	0.75	0.78	0.81	0.84
0	-0.93	-0.81	-0.46	-0.33	-0.23	-0.07	0.03	0.15	0.30	0.46	0.65	0.82	0.93	1.03	1.11
.005	-2.50	-2.54	-2.37	-2.17	-1.99	-1.74	-1.58	-1.39	-1.14	-.90	-.58	-.31	-.09	.11	.31
.013	-2.11	-2.19	-2.25	-2.17	-2.07	-1.87	-1.75	-1.56	-1.30	-1.04	-.76	-.55	-.37	-.19	-.01
.025	-1.86	-1.96	-2.16	-2.18	-2.19	-2.00	-1.88	-1.71	-1.51	-1.31	-1.07	-.87	-.70	-.54	-.36
.075	-1.34	-1.40	-1.60	-1.70	-1.97	-2.02	-2.11	-2.02	-1.83	-1.62	-1.39	-1.19	-1.02	-.85	-.68
.100	-1.17	-1.22	-1.30	-1.27	-1.29	-1.89	-1.98	-1.97	-1.80	-1.61	-1.37	-1.19	-1.03	-.88	-.72
.150	-1.06	-1.11	-1.20	-1.19	-1.22	-1.13	-1.87	-1.91	-1.78	-1.60	-1.39	-1.23	-1.09	-.95	-.80
.200	-.95	-1.00	-1.08	-1.09	-1.13	-1.11	-1.14	-1.84	-1.76	-1.60	-1.41	-1.26	-1.12	-.99	-.85
.250	-.90	-.95	-1.04	-1.04	-1.08	-1.08	-1.02	-1.76	-1.76	-1.59	-1.40	-1.29	-1.17	-1.07	-.94
.300	-.86	-.90	-.99	-.98	-1.02	-1.03	-1.04	-1.60	-1.70	-1.54	-1.37	-1.27	-1.16	-1.08	-.98
.350	-.83	-.86	-.96	-.93	-.97	-.98	-1.01	-.99	-1.69	-1.53	-1.33	-1.24	-1.15	-1.07	-1.01
.400	-.77	-.81	-.87	-.87	-.90	-.91	-.95	-.81	-1.49	-1.37	-1.17	-1.13	-1.06	-1.04	-1.00
.450	-.74	-.77	-.83	-.82	-.85	-.86	-.89	-.81	-1.15	-1.08	-.96	-.96	-.91	-.95	-.99
.500	-.66	-.69	-.74	-.73	-.75	-.75	-.78	-.74	-.77	-.89	-.84	-.82	-.78	-.82	-.92
.550	-.61	-.62	-.66	-.65	-.66	-.66	-.69	-.67	-.62	-.74	-.75	-.74	-.72	-.74	-.83
.600	-.53	-.55	-.58	-.57	-.58	-.58	-.60	-.59	-.52	-.60	-.65	-.67	-.66	-.68	-.74
.650	-.45	-.46	-.48	-.46	-.47	-.46	-.49	-.48	-.42	-.49	-.57	-.61	-.63	-.64	-.69
.700	-.37	-.38	-.40	-.38	-.39	-.38	-.39	-.40	-.35	-.39	-.51	-.55	-.59	-.62	-.66
.750	-.30	-.30	-.30	-.28	-.29	-.28	-.29	-.31	-.27	-.31	-.43	-.50	-.55	-.59	-.64
.800	-.21	-.22	-.21	-.19	-.20	-.19	-.20	-.21	-.19	-.24	-.36	-.44	-.51	-.56	-.61
.850	-.11	-.12	-.11	-.09	-.11	-.09	-.10	-.11	-.11	-.17	-.30	-.39	-.47	-.53	-.59
.900	-.05	-.03	-.05	-.04	-.04	-.03	-.02	-.03	-.05	-.12	-.25	-.34	-.43	-.50	-.57
.950	.03	.03	.01	.01	.01	.02	.03	.04	.02	-.07	-.20	-.29	-.38	-.47	-.55
Lower surface															
x/c \ M	0.32	0.42	0.52	0.54	0.57	0.59	0.62	0.64	0.67	0.70	0.73	0.75	0.78	0.81	0.84
0.005	1.00	1.03	1.06	1.07	1.08	1.09	1.10	1.10	1.11	1.11	1.10	1.06	1.02	0.95	0.90
.013	1.00	1.01	1.02	1.02	1.02	1.02	1.02	1.02	1.00	.97	.92	.87	.81	.74	.68
.025	.86	.87	.87	.87	.87	.87	.87	.87	.85	.81	.76	.70	.65	.58	.53
.050	.62	.63	.63	.63	.63	.63	.63	.64	.62	.59	.54	.50	.44	.40	.36
.075	.49	.51	.51	.51	.51	.51	.51	.52	.51	.48	.44	.40	.37	.31	.29
.100	.44	.45	.45	.45	.46	.46	.46	.46	.45	.43	.39	.36	.33	.28	.26
.150	.35	.37	.36	.36	.37	.37	.37	.38	.38	.36	.32	.29	.26	.22	.20
.200	.29	.30	.29	.30	.31	.31	.31	.32	.31	.29	.26	.23	.20	.16	.14
.250	.25	.26	.26	.26	.27	.27	.27	.28	.27	.26	.22	----	----	----	----
.300	.20	.22	.21	.21	.22	.22	.22	.23	.22	.20	.17	.15	.12	.07	.05
.350	.17	.18	.17	.18	.18	.18	.18	.19	.18	.17	.13	----	----	----	----
.400	.15	.16	.15	.16	.16	.16	.16	.17	.16	.15	.11	.09	.06	.01	-.01
.450	.14	.15	.14	.15	.15	.15	.15	.16	.15	.14	.11	----	----	----	----
.500	.14	.15	.14	.14	.14	.15	.15	.16	.15	.13	.10	.08	.05	.01	-.02
.550	.15	.16	.15	.15	.15	.16	.16	.17	.16	.15	.12	----	----	----	----
.600	.16	.17	.16	.16	.16	.17	.17	.18	.17	.16	.13	.11	.08	.04	.03
.700	.18	.19	.18	.18	.19	.19	.19	.21	.20	.19	.16	----	----	----	----
.750	.19	.20	.19	.19	.20	.21	.21	.22	.22	.20	.17	.15	.12	.09	.09
.800	.20	.21	.20	.21	.21	.23	.23	.24	.23	.21	.18	----	----	----	----
.850	.19	.20	.19	.20	.20	.21	.22	.23	.22	.20	.16	.13	.11	.08	.09
.950	.14	.14	.13	.13	.13	.14	.15	.17	.16	.12	.06	.01	-.03	-.06	-.06

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(i) $\alpha_o = 8^o$

Upper surface

x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.62	0.65	0.67	0.70	0.72	0.76	0.78	0.82
0	-2.51	-2.09	-1.18	-0.99	-0.76	-0.57	-0.42	-0.20	-0.06	0.27	0.44	0.62	0.76	0.90
.005	-3.91	-3.96	-2.92	-2.66	-2.36	-2.09	-1.89	-1.64	-1.37	-1.10	-.80	-.54	-.32	-.09
.013	-3.23	-3.43	-3.35	-3.08	-2.76	-2.48	-2.25	-1.96	-1.63	-1.31	-1.06	-.77	-.56	-.36
.025	-2.56	-2.79	-3.00	-2.98	-2.76	-2.51	-2.30	-2.02	-1.72	-1.45	-1.27	-1.05	-.87	-.68
.075	-1.65	-1.73	-1.97	-2.69	-2.59	-2.52	-2.40	-2.17	-1.95	-1.74	-1.57	-1.36	-1.18	-1.00
.100	-1.44	-1.50	-1.52	-1.60	-2.49	-2.50	-2.36	-2.14	-1.92	-1.72	-1.56	-1.36	-1.19	-1.01
.150	-1.25	-1.30	-1.34	-1.31	-1.43	-2.39	-2.25	-2.10	-1.88	-1.67	-1.55	-1.37	-1.23	-1.06
.200	-1.10	-1.15	-1.20	-1.19	-1.13	-1.43	-2.17	-2.02	-1.83	-1.61	-1.51	-1.33	-1.20	-1.08
.250	-1.03	-1.07	-1.12	-1.11	-1.08	-1.05	-1.82	-1.97	-1.75	-1.51	-1.48	-1.32	-1.20	-1.11
.300	-.95	-1.00	-1.04	-1.04	-1.02	-.95	-1.22	-1.74	-1.62	-1.37	-1.42	-1.25	-1.19	-1.11
.350	-.89	-.94	-.97	-.97	-.96	-.92	-.92	-1.25	-1.35	-1.16	-1.23	-1.13	-1.07	-1.09
.400	-.84	-.86	-.89	-.89	-.89	-.86	-.81	-.97	-1.08	-.99	-1.00	-.96	-.96	-1.02
.450	-.77	-.80	-.83	-.82	-.81	-.80	-.76	-.79	-.91	-.87	-.87	-.83	-.84	-.92
.500	-.69	-.71	-.72	-.72	-.71	-.70	-.68	-.66	-.77	-.77	-.79	-.76	-.76	-.84
.550	-.61	-.62	-.63	-.63	-.62	-.61	-.60	-.57	-.67	-.70	-.72	-.71	-.73	-.79
.600	-.54	-.54	-.54	-.54	-.53	-.53	-.53	-.50	-.57	-.63	-.65	-.67	-.69	-.74
.650	-.44	-.43	-.43	-.43	-.42	-.43	-.44	-.41	-.49	-.57	-.60	-.63	-.67	-.72
.700	-.36	-.35	-.34	-.35	-.34	-.35	-.37	-.35	-.42	-.51	-.55	-.60	-.65	-.70
.750	-.27	-.26	-.25	-.25	-.25	-.26	-.29	-.28	-.36	-.46	-.51	-.57	-.63	-.68
.800	-.19	-.17	-.18	-.18	-.18	-.19	-.22	-.22	-.21	-.41	-.47	-.53	-.60	-.67
.850	-.10	-.10	-.12	-.12	-.11	-.12	-.14	-.16	-.25	-.36	-.43	-.50	-.57	-.65
.900	-.05	-.06	-.09	-.10	-.08	-.07	-.09	-.12	-.22	-.34	-.39	-.46	-.54	-.63
.950	.01	-.03	-.07	-.07	-.05	-.03	-.04	-.07	-.18	-.30	-.35	-.43	-.51	-.61

Lower surface

x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.62	0.65	0.67	0.70	0.72	0.76	0.78	0.82
0.005	0.80	0.88	0.99	1.02	1.05	1.07	1.09	1.11	1.12	1.13	1.12	1.13	1.11	1.07
.013	1.01	1.04	1.06	1.06	1.07	1.08	1.08	1.08	1.05	1.03	1.01	.98	.94	.88
.025	.97	.98	.94	.97	.97	.97	.97	.95	.92	.89	.85	.82	.78	.72
.050	.76	.76	.75	.74	.75	.75	.74	.73	.69	.66	.64	.61	.56	.51
.075	.63	.63	.62	.61	.62	.62	.62	.60	.57	.54	.52	.50	.46	.42
.100	.56	.56	.55	.55	.56	.55	.55	.54	.51	.49	.47	.45	.41	.37
.150	.46	.46	.45	.45	.46	.46	.46	.45	.42	.40	.39	.37	.34	.30
.200	.39	.38	.37	.37	.38	.38	.38	.38	.34	.33	.31	.30	.27	.23
.250	.34	.34	.33	.32	.34	.34	.34	.33	.30	.28	----	----	----	----
.300	.29	.28	.27	.27	.28	.28	.28	.28	.24	.22	.21	.20	.16	.13
.350	.25	.24	.22	.22	.23	.24	.24	.23	.20	.18	----	----	----	----
.400	.22	.21	.20	.19	.20	.21	.21	.20	.17	.15	.14	.12	.09	.05
.450	.20	.20	.18	.18	.19	.19	.19	.18	.15	.13	----	----	----	----
.500	.19	.18	.17	.17	.18	.18	.18	.18	.14	.12	.11	.10	.07	.03
.550	.20	.19	.17	.17	.18	.19	.19	.18	.15	.13	----	----	----	----
.600	.20	.19	.18	.17	.18	.19	.19	.18	.15	.13	.13	.12	.08	.05
.700	.21	.20	.19	.19	.20	.20	.20	.20	.17	.15	----	----	----	----
.750	.21	.20	.19	.19	.20	.21	.21	.21	.17	.15	.15	.14	.11	.08
.800	.23	.21	.21	.20	.21	.22	.22	.21	.18	.18	----	----	----	----
.850	.20	.19	.18	.18	.19	.20	.20	.19	.16	.13	.11	.10	.08	.06
.950	.13	.11	.09	.09	.10	.12	.11	.10	.05	0	-.03	-.05	-.08	-.10

NACA

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(j) $\alpha_o = 10^\circ$

Upper surface													
x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.62	0.65	0.68	0.71	0.74	0.76	0.79
0	-4.26	-3.07	-1.60	-1.34	-1.03	-0.74	-0.53	-0.38	-0.11	0.09	0.26	0.41	0.56
.005	-5.27	-4.69	-3.11	-2.83	-2.46	-2.13	-1.89	-1.63	-1.45	-1.16	-.94	-.74	-.55
.013	-4.67	-4.23	-3.29	-3.12	-2.79	-2.40	-2.15	-1.93	-1.76	-1.53	-1.28	-1.06	-.82
.025	-3.06	-3.80	-3.11	-2.88	-2.62	-2.31	-2.10	-1.90	-1.77	-1.60	-1.39	-1.20	-1.02
.075	-2.03	-2.00	-2.23	-2.36	-2.28	-2.08	-1.94	-1.80	-1.73	-1.66	-1.57	-1.46	-1.32
.100	-1.76	-1.73	-1.91	-1.95	-1.93	-1.89	-1.83	-1.73	-1.66	-1.61	-1.54	-1.44	-1.33
.150	-1.50	-1.45	-1.59	-1.60	-1.59	-1.59	-1.62	-1.56	-1.54	-1.63	-1.49	-1.40	-1.30
.200	-1.31	-1.25	-1.30	-1.33	-1.33	-1.31	-1.38	-1.36	-1.37	-1.38	-1.38	-1.31	-1.25
.250	-1.19	-1.13	-1.12	-1.15	-1.15	-1.12	-1.17	-1.19	-1.19	-1.21	-1.24	-1.21	-1.19
.300	-1.10	-1.04	-.99	-1.01	-1.01	-.99	-1.03	-1.04	-1.05	-1.07	-1.08	-1.08	-1.09
.350	-1.02	-.95	-.89	-.89	-.89	-.89	-.91	-.93	-.94	-.94	-.93	-.92	-.95
.400	-.93	-.85	-.79	-.78	-.79	-.80	-.83	-.85	-.85	-.87	-.85	-.84	-.87
.450	-.86	-.78	-.70	-.70	-.70	-.72	-.75	-.78	-.79	-.81	-.80	-.79	-.80
.500	-.76	-.67	-.60	-.60	-.61	-.65	-.69	-.72	-.73	-.76	-.75	-.75	-.76
.550	-.67	-.58	-.53	-.53	-.54	-.58	-.63	-.67	-.69	-.72	-.71	-.72	-.75
.600	-.56	-.48	-.45	-.46	-.48	-.53	-.57	-.62	-.64	-.68	-.68	-.69	-.73
.650	-.46	-.39	-.38	-.40	-.42	-.47	-.52	-.57	-.60	-.65	-.65	-.67	-.71
.700	-.39	-.32	-.34	-.35	-.39	-.43	-.49	-.54	-.57	-.61	-.63	-.65	-.70
.750	-.32	-.25	-.29	-.31	-.35	-.39	-.45	-.50	-.54	-.59	-.60	-.63	-.69
.800	-.24	-.20	-.25	-.28	-.31	-.36	-.41	-.47	-.51	-.56	-.57	-.61	-.68
.850	-.18	-.16	-.22	-.25	-.29	-.33	-.38	-.44	-.47	-.53	-.55	-.59	-.67
.900	-.11	-.15	-.22	-.24	-.28	-.32	-.36	-.43	-.46	-.49	-.51	-.56	-.64
.950	-.09	-.13	-.19	-.22	-.25	-.29	-.33	-.39	-.42	-.46	-.48	-.53	-.61

Lower surface													
x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.62	0.65	0.68	0.71	0.74	0.76	0.79
0.005	0.49	0.69	0.92	0.97	1.01	1.04	1.07	1.10	1.11	1.12	1.13	1.14	1.14
.013	.96	1.01	1.06	1.07	1.08	1.08	1.09	1.09	1.08	1.08	1.07	1.05	1.02
.025	1.02	1.03	1.02	1.02	1.01	1.00	.99	.98	.96	.95	.93	.91	.87
.050	.86	.84	.82	.81	.80	.78	.77	.75	.74	.73	.71	.69	.66
.075	.73	.71	.69	.68	.67	.65	.65	.63	.62	.61	.59	.57	.55
.100	.65	.64	.62	.61	.60	.59	.58	.57	.55	.55	.53	.52	.49
.150	.54	.53	.51	.51	.50	.49	.48	.47	.46	.45	.44	.43	.41
.200	.46	.44	.43	.42	.42	.41	.40	.39	.38	.38	.37	.35	.33
.250	.41	.39	.38	.38	.36	.36	.35	.34	.33	----	----	----	----
.300	.34	.32	.31	.31	.30	.29	.29	.27	.27	.26	.25	.24	.22
.350	.30	.28	.26	.26	.25	.24	.24	.22	.21	----	----	----	----
.400	.26	.24	.23	.23	.22	.21	.20	.19	.18	.18	.17	.15	.13
.450	.24	.22	.20	.20	.19	.19	.18	.17	.16	----	----	----	----
.500	.22	.20	.19	.19	.17	.17	.16	.15	.14	.14	.13	.11	.09
.550	.22	.20	.19	.18	.17	.17	.16	.15	.14	----	----	----	----
.600	.21	.19	.18	.18	.17	.16	.16	.14	.14	.13	.13	.12	.10
.700	.21	.19	.18	.18	.17	.16	.16	.15	.14	----	----	----	----
.750	.21	.19	.18	.18	.16	.16	.15	.14	.14	.14	.13	.13	.11
.800	.22	.19	.18	.17	.17	.16	.15	.14	.13	----	----	----	----
.850	.19	.16	.15	.15	.13	.13	.12	.10	.10	.09	.09	.08	.06
.950	.09	.06	.03	.02	0	-.01	-.02	-.05	-.06	-.07	-.08	-.09	-.11

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(k) $\alpha_o = 12^{\circ}$

Upper surface												
x/c \ M	0.32	0.42	0.52	0.55	0.57	0.60	0.63	0.65	0.68	0.71	0.74	0.77
0	-4.87	-2.98	-1.36	-1.10	-0.85	-0.64	-0.48	-0.33	-0.18	-0.04	0.09	0.22
.005	-5.54	-4.09	-2.54	-2.27	-2.03	-1.82	-1.67	-1.56	-1.31	-1.17	-1.06	-.92
.013	-5.10	-3.58	-1.99	-1.56	-1.32	-1.18	-1.15	-1.15	-1.09	-1.14	-1.36	-1.25
.025	-3.16	-3.05	-1.84	-1.50	-1.27	-1.13	-1.09	-1.09	-1.03	-1.10	-1.36	-1.30
.075	-2.01	-1.91	-1.49	-1.29	-1.16	-1.01	-1.00	-1.03	-.94	-.93	-1.36	-1.35
.100	-1.71	-1.63	-1.39	-1.25	-1.14	-.99	-.97	-.98	-.90	-.91	-1.33	-1.32
.150	-1.43	-1.34	-1.27	-1.20	-1.12	-.98	-.96	-.97	-.89	-.88	-1.29	-1.25
.200	-1.23	-1.13	-1.15	-1.12	-1.08	-.96	-.94	-.92	-.86	-.84	-1.16	-1.16
.250	-1.10	-1.00	-1.02	-1.04	-1.01	-.92	-.90	-.87	-.84	-.81	-1.03	-1.05
.300	-.99	-.90	-.93	-.97	-.96	-.89	-.87	-.84	-.83	-.80	-.93	-.96
.350	-.89	-.82	-.85	-.90	-.90	-.86	-.84	-.82	-.80	-.77	-.80	-.86
.400	-.79	-.74	-.79	-.85	-.86	-.84	-.82	-.81	-.80	-.78	-.75	-.82
.450	-.71	-.68	-.72	-.79	-.79	-.80	-.78	-.79	-.79	-.77	-.75	-.80
.500	-.62	-.62	-.67	-.74	-.74	-.77	-.76	-.76	-.77	-.75	-.73	-.77
.550	-.54	-.58	-.63	-.69	-.71	-.74	-.73	-.75	-.76	-.75	-.72	-.77
.600	-.48	-.53	-.58	-.65	-.66	-.71	-.71	-.73	-.74	-.74	-.71	-.75
.650	-.43	-.49	-.55	-.61	-.63	-.69	-.69	-.72	-.74	-.75	-.72	-.75
.700	-.38	-.46	-.52	-.59	-.60	-.67	-.66	-.70	-.73	-.73	-.72	-.75
.750	-.35	-.42	-.49	-.56	-.56	-.64	-.64	-.69	-.72	-.73	-.73	-.75
.800	-.34	-.40	-.47	-.53	-.54	-.61	-.61	-.66	-.70	-.71	-.71	-.73
.850	-.32	-.38	-.44	-.49	-.50	-.57	-.58	-.64	-.66	-.68	-.71	-.72
.900	-.32	-.36	-.43	-.46	-.48	-.54	-.57	-.61	-.62	-.65	-.69	-.70
.950	-.29	-.33	-.39	-.42	-.45	-.49	-.51	-.56	-.57	-.60	-.67	-.67
Lower surface												
x/c \ M	0.32	0.42	0.52	0.55	0.57	0.60	0.63	0.65	0.68	0.71	0.74	0.77
0.005	0.31	0.66	0.94	0.98	1.01	1.05	1.07	1.09	1.10	1.12	1.13	1.15
.013	.94	1.01	1.07	1.07	1.08	1.09	1.10	1.10	1.09	1.09	1.09	1.10
.025	1.07	1.03	1.02	1.02	1.01	1.01	1.00	1.00	.99	.98	.98	.97
.050	.92	.85	.83	.82	.81	.80	.79	.79	.78	.77	.76	.76
.075	.78	.72	.70	.69	.68	.67	.67	.66	.65	.65	.64	.64
.100	.70	.65	.63	.62	.62	.61	.60	.60	.59	.59	.57	.57
.150	.58	.54	.52	.52	.51	.50	.50	.50	.49	.49	.48	.48
.200	.48	.45	.44	.43	.43	.42	.42	.41	.41	.40	.40	.40
.250	.43	.39	.39	.38	.38	.37	.37	.36	----	----	----	----
.300	.36	.33	.32	.31	.31	.30	.30	.29	.29	.28	.28	.28
.350	.30	.27	.27	.25	.25	.24	.24	.24	----	----	----	----
.400	.26	.23	.23	.22	.22	.20	.20	.20	.19	.19	.18	.18
.450	.23	.20	.20	.19	.19	.17	.17	.17	----	----	----	----
.500	.21	.19	.18	.17	.17	.15	.15	.15	.14	.14	.14	.13
.550	.20	.18	.17	.16	.16	.15	.14	.14	----	----	----	----
.600	.19	.17	.16	.15	.15	.14	.12	.13	.14	.13	.12	.12
.700	.17	.15	.15	.14	.14	.13	.15	.12	----	----	----	----
.750	.17	.15	.15	.13	.13	.12	.13	.11	.11	.11	.11	.11
.800	.15	.14	.13	.12	.12	.11	.12	.10	----	----	----	----
.850	.12	.10	.09	.08	.08	.07	.03	.05	.05	.06	.06	.06
.950	-.03	-.06	-.07	-.08	-.09	-.11	-.12	-.13	-.14	-.14	-.14	-.13

NACA

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(l) $\alpha_o = 14^\circ$

Upper surface											
x/c \ M	0.31	0.42	0.52	0.55	0.57	0.60	0.63	0.66	0.69	0.71	0.75
0	-4.42	-2.77	-1.58	-1.29	-0.94	-0.76	-0.60	-0.51	-0.39	-0.26	-0.13
.005	-4.91	-3.57	-2.72	-2.35	-1.85	-1.69	-1.58	-1.47	-1.42	-1.31	-1.20
.013	-4.41	-3.12	-2.33	-1.83	-1.11	-.89	-.86	-1.27	-.90	-.99	-1.15
.025	-2.70	-2.51	-2.19	-1.75	-1.07	-.88	-.87	-1.08	-.88	-.97	-1.15
.075	-1.59	-1.56	-1.34	-1.14	-.96	-.82	-.79	-.99	-.83	-.89	-1.03
.100	-1.34	-1.31	-1.13	-1.04	-.94	-.84	-.78	-.77	-.82	-.88	-1.00
.150	-1.09	-1.07	-.95	-.96	-.93	-.85	-.80	-.75	-.83	-.89	-.98
.200	-.97	-.95	-.86	-.90	-.92	-.86	-.81	-.73	-.83	-.88	-.95
.250	-.92	-.89	-.80	-.86	-.89	-.86	-.81	-.74	-.84	-.89	-.94
.300	-.87	-.83	-.76	-.83	-.88	-.87	-.82	-.73	-.84	-.88	-.92
.350	-.83	-.79	-.75	-.81	-.86	-.87	-.82	-.73	-.83	-.87	-.91
.400	-.78	-.76	-.73	-.80	-.85	-.88	-.82	-.75	-.85	-.88	-.90
.450	-.74	-.73	-.72	-.78	-.82	-.86	-.80	-.74	-.82	-.87	-.89
.500	-.70	-.70	-.71	-.76	-.80	-.85	-.79	-.73	-.81	-.85	-.87
.550	-.68	-.68	-.70	-.75	-.77	-.83	-.78	-.73	-.80	-.84	-.86
.600	-.63	-.65	-.69	-.73	-.76	-.81	-.77	-.72	-.78	-.82	-.83
.650	-.62	-.63	-.68	-.71	-.72	-.79	-.75	-.73	-.77	-.80	-.82
.700	-.58	-.61	-.67	-.69	-.69	-.77	-.73	-.72	-.75	-.79	-.80
.750	-.56	-.59	-.66	-.68	-.67	-.74	-.71	-.72	-.73	-.77	-.77
.800	-.54	-.57	-.63	-.65	-.64	-.70	-.69	-.70	-.71	-.75	-.75
.850	-.52	-.54	-.61	-.63	-.61	-.67	-.65	-.68	-.68	-.72	-.72
.900	-.52	-.54	-.62	-.61	-.60	-.62	-.65	-.64	-.64	-.69	-.70
.950	-.47	-.51	-.59	-.57	-.56	-.57	-.61	-.61	-.61	-.65	-.66
Lower surface											
x/c \ M	0.31	0.42	0.52	0.55	0.57	0.60	0.63	0.66	0.69	0.71	0.75
0.005	0.35	0.68	0.90	0.95	0.99	1.02	1.05	1.06	1.08	1.11	1.12
.013	.91	1.01	1.06	1.08	1.08	1.09	1.10	1.10	1.11	1.12	1.12
.025	1.01	1.03	1.04	1.03	1.03	1.03	1.03	1.03	1.03	1.03	1.03
.050	.88	.87	.84	.85	.84	.84	.83	.83	.83	.83	.83
.075	.75	.73	.71	.72	.72	.71	.71	.70	.70	.70	.70
.100	.67	.66	.64	.64	.65	.64	.64	.63	.64	.63	.64
.150	.56	.55	.54	.54	.54	.54	.54	.53	.54	.53	.54
.200	.47	.45	.45	.45	.45	.45	.45	.45	.45	.44	.45
.250	.41	.40	.39	.39	.40	.40	.39	----	----	----	----
.300	.34	.32	.31	.32	.32	.32	.32	.32	.33	.32	.33
.350	.28	.27	.26	.26	.27	.26	.26	----	----	----	----
.400	.24	.22	.21	.22	.22	.22	.22	.22	.22	.22	.23
.450	.21	.19	.18	.19	.19	.19	.18	----	----	----	----
.500	.19	.17	.16	.16	.17	.17	.16	.16	.17	.16	.17
.550	.17	.15	.15	.15	.15	.15	.15	----	----	----	----
.600	.16	.14	.13	.14	.14	.14	.14	.14	.14	.13	.14
.700	.14	.12	.11	.11	.12	.12	.12	----	----	----	----
.750	.13	.11	.10	.10	.11	.11	.10	.11	.11	.11	.12
.800	.10	.10	.08	.09	.09	.09	.09	----	----	----	----
.850	.06	.05	.03	.04	.04	.04	.04	.05	.05	.04	.06
.950	-.11	-.14	-.16	-.16	-.15	-.15	-.17	-.16	-.15	-.17	-.15

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(m) $\alpha_o = 16^\circ$

Upper surface

x/c \ M	0.32	0.42	0.52	0.55	0.57	0.60	0.63	0.66	0.69
0	-3.51	-2.62	-1.70	-1.49	-1.33	-1.07	-0.88	-0.75	-0.60
.005	-3.59	-3.06	-2.26	-2.11	-2.11	-1.99	-1.85	-1.60	-1.47
.013	-2.91	-2.76	-2.06	-1.97	-1.93	-1.66	-1.34	-1.00	-.92
.025	-2.02	-2.22	-1.93	-1.84	-1.84	-1.61	-1.31	-.98	-.88
.075	-1.16	-1.42	-1.49	-1.44	-1.46	-1.31	-1.16	-.94	-.88
.100	-1.00	-1.19	-1.31	-1.29	-1.33	-1.17	-1.08	-.93	-.87
.150	-.77	-.99	-1.04	-1.00	-1.06	-1.00	-.99	-.91	-.88
.200	-.71	-.90	-.85	-.83	-.88	-.91	-.93	-.89	-.86
.250	-.71	-.86	-.80	-.77	-.80	-.83	-.89	-.89	-.85
.300	-.71	-.80	-.77	-.75	-.78	-.79	-.86	-.89	-.86
.350	-.72	-.78	-.77	-.74	-.77	-.78	-.85	-.89	-.85
.400	-.72	-.75	-.76	-.74	-.76	-.78	-.84	-.89	-.86
.450	-.73	-.75	-.77	-.74	-.78	-.77	-.83	-.89	-.85
.500	-.74	-.74	-.77	-.75	-.78	-.77	-.82	-.88	-.86
.550	-.75	-.74	-.77	-.76	-.79	-.76	-.81	-.87	-.85
.600	-.76	-.73	-.78	-.75	-.79	-.76	-.79	-.85	-.84
.650	-.77	-.72	-.77	-.76	-.79	-.75	-.78	-.83	-.83
.700	-.77	-.71	-.77	-.77	-.79	-.74	-.77	-.81	-.81
.750	-.78	-.70	-.76	-.76	-.78	-.74	-.76	-.79	-.80
.800	-.74	-.68	-.75	-.75	-.78	-.73	-.75	-.77	-.78
.850	-.72	-.66	-.74	-.73	-.76	-.71	-.73	-.74	-.76
.900	-.64	-.65	-.74	-.74	-.74	-.73	-.73	-.71	-.73
.950	-.62	-.62	-.71	-.72	-.72	-.70	-.70	-.68	-.69

Lower surface

x/c \ M	0.32	0.42	0.52	0.55	0.57	0.60	0.63	0.66	0.69
0.005	0.51	0.69	0.88	0.91	0.95	0.98	1.01	1.02	1.04
.013	.96	1.01	1.07	1.07	1.09	1.09	1.10	1.10	1.11
.025	1.01	1.03	1.05	1.04	1.05	1.05	1.05	1.05	1.05
.050	.86	.87	.87	.86	.87	.87	.87	.86	.87
.075	.73	.74	.74	.73	.74	.74	.74	.73	.74
.100	.66	.67	.66	.67	.67	.67	.67	.67	.67
.150	.55	.56	.55	.55	.56	.56	.57	.56	.57
.200	.46	.47	.46	.46	.46	.47	.47	.47	.48
.250	.40	.41	.40	.40	.40	.41	.41	----	----
.300	.33	.33	.32	.32	.32	.33	.33	.34	.35
.350	.27	.27	.26	.26	.26	.27	.27	----	----
.400	.23	.22	.21	.21	.21	.22	.22	.23	.24
.450	.20	.19	.17	.18	.17	.18	.18	----	----
.500	.17	.16	.15	.15	.15	.15	.16	.16	.17
.550	.15	.15	.13	.13	.13	.14	.14	----	----
.600	.13	.12	.11	.12	.11	.12	.12	.13	.14
.700	.10	.10	.08	.08	.08	.09	.09	----	----
.750	.08	.08	.06	.07	.06	.07	.08	.09	.10
.800	.06	.07	.04	.05	.05	.06	.06	----	----
.850	.02	.02	-.01	-.01	-.01	0	0	.01	.03
.950	-.19	-.19	-.24	-.24	-.23	-.23	-.23	-.21	-.19

(n) $\alpha_o = 18^\circ$

Upper surface

x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.62	0.65	0.68
0	-3.00	-2.53	-2.00	-1.87	-1.66	-1.50	-1.34	-1.14	-0.99
.005	-3.03	-2.72	-2.65	-2.69	-2.65	-2.49	-2.34	-2.00	-1.81
.013	-2.81	-2.50	-2.44	-2.44	-2.38	-2.23	-2.18	-1.73	-1.42
.025	-1.70	-1.69	-1.93	-2.01	-2.15	-2.11	-2.10	-1.75	-1.41
.075	-.98	-1.05	-1.03	-1.07	-1.09	-1.12	-1.20	-1.36	-1.36
.100	-.79	-.85	-.77	-.78	-.76	-.77	-.75	-.84	-1.22
.150	-.69	-.73	-.67	-.69	-.68	-.71	-.71	-.89	-1.19
.200	-.64	-.67	-.63	-.65	-.65	-.67	-.67	-.82	-1.11
.250	-.63	-.65	-.63	-.64	-.64	-.66	-.66	-.80	-1.08
.300	-.64	-.66	-.64	-.65	-.65	-.66	-.67	-.78	-1.02
.350	-.65	-.66	-.65	-.66	-.66	-.67	-.68	-.74	-.91
.400	-.66	-.66	-.65	-.67	-.67	-.67	-.68	-.72	-.84
.450	-.66	-.66	-.66	-.67	-.68	-.68	-.69	-.71	-.80
.500	-.68	-.66	-.67	-.69	-.69	-.69	-.70	-.71	-.77
.550	-.70	-.68	-.69	-.70	-.70	-.70	-.71	-.72	-.76
.600	-.71	-.70	-.70	-.72	-.72	-.71	-.73	-.72	-.75
.650	-.73	-.71	-.71	-.73	-.73	-.73	-.74	-.73	-.75
.700	-.75	-.72	-.73	-.74	-.74	-.74	-.76	-.74	-.76
.750	-.75	-.73	-.74	-.75	-.75	-.75	-.77	-.75	-.77
.800	-.76	-.74	-.75	-.76	-.77	-.76	-.77	-.76	-.78
.850	-.76	-.75	-.75	-.77	-.77	-.77	-.78	-.77	-.78
.900	-.73	-.74	-.75	-.74	-.76	-.75	-.76	-.77	-.79
.950	-.72	-.73	-.74	-.73	-.75	-.75	-.76	-.77	-.78

Lower surface

x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.62	0.65	0.68
0.005	0.57	0.67	0.80	0.84	0.87	0.90	0.93	0.96	0.98
.013	.96	1.00	1.05	1.06	1.07	1.08	1.10	1.10	1.12
.025	1.02	1.03	1.06	1.06	1.06	1.07	1.08	1.07	1.08
.050	.88	.89	.90	.90	.91	.91	.92	.91	.92
.075	.75	.76	.76	.78	.78	.79	.80	.79	.80
.100	.68	.69	.71	.71	.71	.72	.73	.72	.73
.150	.57	.58	.60	.60	.61	.61	.62	.62	.62
.200	.48	.49	.50	.51	.51	.52	.53	.55	.55
.250	.41	.43	.44	.45	.45	.46	.46	----	----
.300	.34	.36	.36	.37	.37	.37	.39	.39	.39
.350	.28	.29	.30	.31	.31	.32	.32	----	----
.400	.23	.24	.25	.26	.26	.27	.27	.27	.27
.450	.19	.20	.21	.22	.22	.23	.23	----	----
.500	.17	.17	.18	.18	.19	.20	.19	.18	.20
.550	.15	.16	.16	.17	.17	.18	.18	----	----
.600	.13	.13	.14	.15	.14	.16	.16	.15	.16
.700	.08	.09	.10	.10	.10	.11	.12	----	----
.750	.06	.07	.08	.08	.08	.10	.09	.10	.11
.800	.03	.05	.05	.06	.06	.07	.07	----	----
.850	-.03	-.02	-.02	-.01	-.01	.01	.01	.01	.02
.950	-.27	-.26	-.27	-.25	-.26	-.25	-.25	-.24	-.22

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Continued

(o) $\alpha_o = 20^\circ$

Upper surface

x/c \ M	0.31	0.42	0.52	0.55	0.57	0.60	0.63	0.65	0.69
0	-2.10	-2.33	-2.05	-1.93	-1.82	-1.65	-1.48	-1.34	-1.15
.005	-1.73	-2.02	-2.01	-1.96	-2.06	-2.00	-2.08	-2.11	-1.93
.013	-1.67	-1.91	-1.98	-1.93	-2.05	-2.01	-2.06	-2.00	-1.82
.025	-1.49	-1.52	-1.69	-1.68	-1.74	-1.68	-1.77	-1.87	-1.79
.075	-1.11	-1.09	-1.15	-1.15	-1.17	-1.10	-1.08	-1.16	-1.34
.100	-.94	-.84	-.81	-.85	-.84	-.87	-.88	-.89	-.89
.150	-.72	-.66	-.66	-.67	-.67	-.69	-.70	-.72	-.72
.200	-.65	-.62	-.62	-.63	-.64	-.64	-.66	-.68	-.69
.250	-.63	-.61	-.61	-.63	-.63	-.65	-.65	-.68	-.68
.300	-.65	-.63	-.63	-.64	-.65	-.65	-.67	-.69	-.69
.350	-.67	-.64	-.63	-.65	-.66	-.66	-.67	-.70	-.70
.400	-.68	-.64	-.64	-.66	-.67	-.67	-.69	-.71	-.71
.450	-.69	-.66	-.66	-.67	-.68	-.69	-.70	-.72	-.72
.500	-.70	-.67	-.67	-.69	-.69	-.70	-.71	-.73	-.73
.550	-.71	-.68	-.69	-.69	-.71	-.71	-.73	-.74	-.74
.600	-.72	-.69	-.70	-.70	-.72	-.72	-.73	-.75	-.75
.650	-.74	-.70	-.71	-.71	-.73	-.73	-.74	-.76	-.76
.700	-.75	-.72	-.72	-.73	-.74	-.74	-.75	-.77	-.77
.750	-.75	-.73	-.73	-.73	-.75	-.75	-.77	-.78	-.78
.800	-.76	-.73	-.74	-.74	-.75	-.76	-.77	-.79	-.78
.850	-.76	-.74	-.74	-.75	-.77	-.76	-.77	-.79	-.79
.900	-.76	-.74	-.74	-.74	-.76	-.76	-.78	-.79	-.78
.950	-.74	-.74	-.75	-.75	-.77	-.76	-.78	-.79	-.79

Lower surface

x/c \ M	0.31	0.42	0.52	0.55	0.57	0.60	0.63	0.65	0.69
0.005	0.58	0.65	0.74	0.77	0.79	0.84	0.87	0.89	0.93
.013	.96	.96	1.03	1.04	1.05	1.06	1.08	1.10	1.11
.025	1.02	1.03	1.07	1.07	1.08	1.08	1.09	1.10	1.11
.050	.89	.91	.94	.94	.95	.95	.95	.96	.97
.075	.77	.79	.82	.82	.83	.84	.84	.85	.86
.100	.70	.72	.75	.75	.76	.77	.77	.78	.79
.150	.59	.61	.64	.64	.65	.66	.66	.67	.68
.200	.50	.52	.55	.55	.56	.56	.57	.58	.59
.250	.44	.46	.49	.49	.50	.50	.51	.52	.53
.300	.36	.37	.41	.41	.42	.42	.42	.43	.45
.350	.30	.31	.34	.34	.35	.35	.35	.36	.38
.400	.25	.26	.29	.29	.29	.30	.30	.30	.32
.450	.20	.21	.25	.24	.25	.26	.25	.26	.28
.500	.17	.18	.21	.21	.22	.22	.22	.23	.24
.550	.14	.16	.19	.19	.19	.20	.18	.19	.22
.600	.12	.13	.16	.16	.17	.17	.17	.18	.20
.700	.07	.08	.11	.11	.12	.12	.12	.13	.15
.750	.04	.06	.09	.08	.09	.10	.09	.11	.13
.800	.01	.03	.07	.06	.06	.07	.07	.08	.10
.850	-.06	-.04	0	0	-.01	0	.01	.01	.04
.950	-.31	-.30	-.26	-.27	-.27	-.26	-.26	-.25	-.22

(p) $\alpha_o = 22^\circ$

Upper surface

x/c \ M	0.32	0.42	0.52	0.54	0.58	0.60	0.63
0	-1.51	-1.57	-1.40	-1.29	-1.19	-0.92	-0.95
.005	-1.32	-1.44	-1.29	-1.20	-1.13	-.81	-.86
.013	-1.22	-1.34	-1.19	-1.06	-1.08	-.80	-.88
.025	-1.17	-1.24	-.93	-.88	-.92	-.80	-.86
.075	-1.01	-1.25	-.75	-.71	-.73	-.78	-.83
.100	-1.02	-1.24	-.73	-.69	-.71	-.77	-.80
.150	-.97	-1.20	-.73	-.70	-.72	-.78	-.77
.200	-.92	-1.11	-.72	-.69	-.71	-.79	-.76
.250	-.86	-.95	-.72	-.69	-.71	-.78	-.75
.300	-.80	-.86	-.72	-.69	-.72	-.79	-.76
.350	-.76	-.78	-.71	-.70	-.72	-.78	-.77
.400	-.74	-.74	-.72	-.71	-.73	-.79	-.77
.450	-.72	-.71	-.72	-.71	-.73	-.79	-.77
.500	-.72	-.70	-.73	-.72	-.73	-.80	-.77
.550	-.72	-.70	-.73	-.72	-.73	-.81	-.78
.600	-.73	-.69	-.73	-.73	-.74	-.81	-.78
.650	-.73	-.70	-.74	-.73	-.75	-.82	-.79
.700	-.74	-.71	-.75	-.74	-.76	-.82	-.79
.750	-.74	-.72	-.75	-.75	-.76	-.82	-.79
.800	-.74	-.72	-.75	-.75	-.76	-.82	-.80
.850	-.75	-.73	-.75	-.74	-.75	-.82	-.79
.900	-.73	-.74	-.75	-.75	-.76	-.83	-.77
.950	-.73	-.74	-.74	-.74	-.75	-.81	-.77

Lower surface

x/c \ M	0.32	0.42	0.52	0.54	0.58	0.60	0.63
0.005	0.57	0.60	0.75	0.78	0.80	0.84	0.84
.013	.94	.96	1.03	1.04	1.05	1.07	1.07
.025	1.02	1.04	1.06	1.07	1.08	1.09	1.09
.050	.92	.94	.95	.96	.96	.97	.98
.075	.81	.83	.84	.85	.85	.86	.87
.100	.74	.76	.77	.78	.79	.80	.80
.150	.63	.66	.66	.67	.68	.69	.70
.200	.55	.57	.58	.59	.60	.61	.61
.250	.47	.50	.51	.52	.53	.54	.55
.300	.39	.41	.42	.43	.44	.45	.46
.350	.33	.35	.36	.36	.38	.39	.39
.400	.27	.29	.30	.31	.32	.33	.34
.450	.23	.25	.25	.26	.27	.28	.29
.500	.19	.21	.22	.23	.23	.24	.25
.550	.17	.18	.19	.20	.21	.21	.23
.600	.14	.15	.16	.17	.18	.19	.20
.700	.08	.10	.11	.12	.12	.13	.14
.750	.05	.07	.08	.09	.10	.10	.12
.800	.01	.04	.05	.06	.07	.07	.09
.850	-.05	-.03	-.02	-.01	0	0	.02
.950	-.30	-.29	-.28	-.27	-.26	-.27	-.25

TABLE VI.- PRESSURE COEFFICIENTS FOR THE NACA 64A410 AIRFOIL SECTION - Concluded

(q) $\alpha_o = 24^o$

Upper surface						
x/c \ M	0.32	0.42	0.53	0.55	0.58	0.60
0	-0.77	-0.76	-0.81	-0.82	-0.83	-0.85
.005	-.66	-.67	-.72	-.73	-.74	-.76
.013	-.67	-.67	-.73	-.73	-.74	-.77
.025	-.66	-.66	-.72	-.73	-.74	-.77
.075	-.66	-.66	-.71	-.72	-.73	-.76
.100	-.66	-.66	-.72	-.73	-.74	-.76
.150	-.66	-.66	-.72	-.73	-.74	-.76
.200	-.66	-.67	-.72	-.73	-.74	-.76
.250	-.66	-.67	-.73	-.73	-.74	-.77
.300	-.67	-.67	-.74	-.75	-.75	-.77
.350	-.68	-.68	-.74	-.75	-.76	-.78
.400	-.69	-.69	-.75	-.75	-.77	-.78
.450	-.69	-.69	-.76	-.76	-.77	-.79
.500	-.70	-.70	-.77	-.76	-.78	-.79
.550	-.70	-.70	-.77	-.77	-.78	-.80
.600	-.71	-.70	-.77	-.78	-.78	-.80
.650	-.71	-.71	-.77	-.78	-.79	-.81
.700	-.72	-.71	-.78	-.78	-.78	-.81
.750	-.72	-.71	-.78	-.78	-.78	-.81
.800	-.71	-.70	-.78	-.78	-.78	-.81
.850	-.71	-.70	-.78	-.78	-.78	-.80
.900	-.70	-.69	-.76	-.76	-.77	-.79
.950	-.68	-.67	-.75	-.75	-.76	-.78
Lower surface						
x/c \ M	0.32	0.42	0.53	0.55	0.58	0.60
0.005	0.67	0.70	0.72	0.73	0.75	0.76
.013	.95	.97	1.01	1.02	1.03	1.04
.025	1.01	1.03	1.06	1.08	1.08	1.10
.050	.92	.94	.98	.99	.99	1.01
.075	.81	.84	.88	.89	.89	.91
.100	.75	.77	.81	.83	.83	.85
.150	.65	.67	.71	.72	.73	.75
.200	.56	.58	.62	.63	.63	.65
.250	.50	.52	.55	.57	.57	.59
.300	.42	.43	.47	.48	.49	.51
.350	.36	.37	.40	.41	.42	.44
.400	.30	.31	.34	.36	.36	.38
.450	.25	.26	.29	.31	.31	.33
.500	.22	.22	.25	.27	.27	.29
.550	.19	.20	.22	.24	.24	.26
.600	.16	.17	.19	.21	.21	.23
.700	.10	.11	.12	.15	.15	.17
.750	.07	.07	.09	.12	.11	.13
.800	.03	.04	.06	.08	.08	.10
.850	-.03	-.02	-.01	-.01	.01	.03
.950	-.27	-.28	-.28	-.26	-.26	-.25

(r) $\alpha_o = 26^o$

Upper surface				
x/c \ M	0.32	0.42	0.53	0.55
0	-0.77	-0.79	-0.85	-0.86
.005	-.73	-.74	-.80	-.82
.013	-.72	-.74	-.80	-.83
.025	-.73	-.73	-.79	-.82
.075	-.72	-.73	-.79	-.82
.100	-.72	-.73	-.79	-.82
.150	-.72	-.74	-.80	-.83
.200	-.73	-.74	-.80	-.83
.250	-.73	-.74	-.80	-.83
.300	-.74	-.75	-.81	-.84
.350	-.74	-.75	-.81	-.84
.400	-.75	-.76	-.83	-.85
.450	-.75	-.77	-.83	-.85
.500	-.76	-.77	-.83	-.86
.550	-.76	-.78	-.84	-.87
.600	-.77	-.77	-.84	-.86
.650	-.77	-.78	-.84	-.87
.700	-.78	-.78	-.85	-.88
.750	-.77	-.78	-.85	-.88
.800	-.77	-.78	-.84	-.87
.850	-.77	-.77	-.84	-.87
.900	-.75	-.76	-.83	-.85
.950	-.74	-.75	-.81	-.84
Lower surface				
x/c \ M	0.32	0.42	0.53	0.55
0.005	0.55	0.58	0.59	0.61
.013	.91	.93	.96	.97
.025	1.01	1.03	1.06	1.07
.050	.97	.98	1.02	1.03
.075	.87	.88	.93	.94
.100	.81	.82	.87	.88
.150	.71	.72	.77	.78
.200	.62	.63	.68	.69
.250	.56	.57	.62	.63
.300	.48	.49	.54	.55
.350	.41	.41	.47	.48
.400	.35	.36	.41	.42
.450	.30	.30	.36	.37
.500	.26	.26	.32	.33
.550	.23	.23	.28	.29
.600	.19	.19	.25	.26
.700	.12	.13	.18	.18
.750	.09	.09	.14	.15
.800	.05	.05	.10	.11
.850	-.02	-.02	.02	.03
.950	-.28	-.30	-.27	-.26

(s) $\alpha_o = 28^o$

Upper surface			
x/c \ M	0.32	0.43	0.54
0	-0.88	-0.88	-0.89
.005	-.86	-.86	-.87
.013	-.86	-.86	-.87
.025	-.86	-.85	-.87
.075	-.86	-.85	-.86
.100	-.86	-.85	-.87
.150	-.86	-.85	-.87
.200	-.86	-.86	-.88
.250	-.86	-.87	-.88
.300	-.87	-.87	-.89
.350	-.88	-.88	-.89
.400	-.89	-.89	-.90
.450	-.90	-.89	-.91
.500	-.90	-.89	-.91
.550	-.90	-.90	-.92
.600	-.90	-.90	-.92
.650	-.90	-.90	-.93
.700	-.90	-.90	-.92
.750	-.90	-.90	-.93
.800	-.89	-.89	-.92
.850	-.89	-.88	-.91
.900	-.88	-.87	-.89
.950	-.87	-.86	-.89
Lower surface			
x/c \ M	0.32	0.43	0.54
0.005	0.36	0.46	0.48
.013	.84	.87	.91
.025	1.00	1.02	1.05
.050	1.00	1.01	1.05
.075	.92	.93	.97
.100	.86	.88	.92
.150	.77	.78	.82
.200	.68	.69	.73
.250	.62	.63	.67
.300	.53	.55	.59
.350	.46	.48	.52
.400	.40	.42	.46
.450	.35	.36	.41
.500	.30	.32	.36
.550	.26	.26	.32
.600	.23	.24	.29
.700	.14	.16	.21
.750	.10	.12	.17
.800	.06	.06	.12
.850	-.02	0	.04
.950	-.32	-.31	-.27

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION

(a) $\alpha_0 = -2^\circ$

Upper surface

x/c \ M	0.30	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.73	0.76	0.78	0.81	0.84	0.87	0.90	0.93
0	0.75	0.80	0.84	0.85	0.90	0.93	0.95	0.97	1.00	1.02	1.04	1.08	1.10	1.14	1.15	1.18	1.20
.006	.79	.81	.82	.83	.85	.85	.85	.86	.86	.86	.86	.86	.86	.87	.86	.83	.80
.016	.45	.49	.50	.51	.53	.52	.53	.53	.54	.54	.54	.55	.55	.56	.56	.54	.51
.027	.28	.30	.31	.32	.34	.33	.34	.34	.34	.35	.36	.36	.36	.38	.38	.36	.33
.051	.16	.19	.19	.20	.21	.21	.21	.21	.22	.23	.23	.23	.24	.26	.26	.23	.21
.080	.09	.11	.10	.12	.13	.13	.12	.13	.13	.14	.14	.15	.15	.17	.17	.14	.13
.106	.04	.07	.06	.08	.07	.07	.07	.07	.07	.08	.08	.07	.09	.10	.10	.08	.06
.154	.02	.04	.03	.04	.04	.04	.03	.03	.03	.04	.04	.04	.05	.07	.06	.04	.02
.199	0	.02	0	.01	.01	0	0	0	0	.01	.01	0	.02	.03	.02	0	-.02
.255	-.04	-.02	-.03	-.02	-.03	-.03	-.03	-.03	-.04	-.03	-.03	-.04	-.04	-.02	-.03	-.06	-.08
.304	-.04	-.04	-.04	-.04	-.04	-.05	-.05	-.06	-.06	-.06	-.06	-.07	-.06	-.05	-.06	-.09	-.11
.351	-.06	-.05	-.06	-.05	-.05	-.06	-.06	-.07	-.08	-.07	-.07	-.08	-.07	-.07	-.08	-.11	-.14
.399	-.08	-.06	-.08	-.08	-.08	-.09	-.09	-.10	-.11	-.10	-.11	-.12	-.12	-.11	-.12	-.17	-.21
.448	-.08	-.07	-.09	-.08	-.08	-.09	-.10	-.11	-.12	-.10	-.11	-.13	-.12	-.12	-.13	-.19	-.25
.502	-.08	-.06	-.08	-.08	-.08	-.09	-.09	-.10	-.11	-.10	-.10	-.12	-.11	-.11	-.12	-.17	-.28
.551	-.06	-.04	-.06	-.06	-.06	-.06	-.07	-.08	-.08	-.08	-.08	-.09	-.09	-.08	-.09	-.13	-.26
.600	-.04	-.04	-.05	-.04	-.04	-.04	-.05	-.06	-.06	-.05	-.06	-.08	-.07	-.06	-.06	-.10	-.22
.655	-.03	-.02	-.03	-.02	-.02	-.03	-.03	-.04	-.04	-.04	-.04	-.05	-.04	-.03	-.03	-.07	-.17
.758	-.03	-.01	-.02	-.02	-.02	-.02	-.02	-.04	-.04	-.02	-.03	-.04	-.04	-.02	-.01	-.03	-.06
.804	-.03	.01	0	.04	.03	.03	.03	.02	.02	.03	.03	.02	.03	.04	.05	.04	.02
.904	.02	.05	.05	.07	.07	.07	.07	.06	.06	.08	.08	.06	.08	.10	.11	.10	.07
.955	.03	.06	.04	.05	.05	.05	.05	.04	.04	.06	.06	.05	.07	.09	.10	.08	.03
1.000	.02	.08	.07	.09	.08	.09	.09	.08	.08	.10	.11	.09	.11	.12	.15	.13	.05

Lower surface

x/c \ M	0.30	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.73	0.76	0.78	0.81	0.84	0.87	0.90	0.93
0.015	-0.92	-0.96	-1.08	-1.16	-1.19	-1.22	-1.22	-1.24	-1.24	-1.21	-1.27	-1.20	-1.07	-0.95	-0.85	-0.72	-0.56
.028	-.56	-.54	-.58	-.56	-.66	-.96	-1.08	-1.18	-1.18	-1.12	-1.14	-1.14	-1.03	-.92	-.81	-.69	-.54
.052	-.38	-.38	-.43	-.44	-.45	-.45	-.45	-.47	-.51	-.91	-1.03	-1.01	-.93	-.83	-.74	-.61	-.47
.080	-.34	-.34	-.38	-.40	-.43	-.45	-.45	-.49	-.53	-.50	-.60	-.92	-.90	-.82	-.74	-.63	-.50
.106	-.32	-.32	-.36	-.37	-.38	-.40	-.41	-.43	-.44	-.42	-.38	-.77	-.82	-.76	-.67	-.56	-.43
.154	-.30	-.28	-.34	-.34	-.35	-.38	-.38	-.40	-.42	-.42	-.42	-.43	-.77	-.74	-.66	-.56	-.44
.204	-.29	-.28	-.33	-.33	-.35	-.36	-.38	-.40	-.42	-.42	-.44	-.40	-.71	-.77	-.70	-.61	-.49
.251	-.25	-.25	-.30	-.30	-.32	-.33	-.34	-.36	-.38	-.38	-.41	-.40	-.54	-.74	-.68	-.59	-.48
.300	-.25	-.24	-.28	-.28	-.30	-.31	-.32	-.34	-.36	-.36	-.38	----	----	----	----	----	----
.352	-.24	-.23	-.27	-.27	-.29	-.30	-.31	-.33	-.34	-.35	-.37	-.40	-.34	-.74	-.71	-.62	-.52
.401	-.23	-.23	-.26	-.27	-.28	-.29	-.31	-.32	-.34	-.34	-.36	----	----	----	----	----	----
.452	-.22	-.21	-.24	-.24	-.25	-.26	-.27	-.29	-.30	-.30	-.32	-.35	-.32	-.60	-.79	-.70	-.61
.500	-.19	-.17	-.21	-.21	-.22	-.23	-.24	-.25	-.26	-.26	-.27	----	----	----	----	----	----
.555	-.16	-.15	-.18	-.18	-.19	-.20	-.20	-.22	-.22	-.22	-.23	-.26	-.24	-.23	-.78	-.74	-.63
.602	-.17	-.15	-.18	-.18	-.19	-.20	-.20	-.22	-.22	-.22	-.23	----	----	----	----	----	----
.655	-.13	-.14	-.15	-.16	-.16	-.17	-.17	-.17	-.18	-.18	-.18	-.20	-.19	-.11	-.45	-.69	-.61
.707	-.10	-.11	-.11	-.13	-.12	-.13	-.13	-.13	-.13	-.13	-.13	----	----	----	----	----	----
.755	-.20	-.07	-.07	-.08	-.08	-.08	-.07	-.08	-.08	-.08	-.08	-.10	-.08	-.04	-.10	-.40	-.59
.852	-.14	.01	.02	.01	.01	.01	.02	.02	.01	.02	.03	.01	.03	.06	.06	-.08	-.33
.904	-.06	.02	.02	.02	.03	.03	.03	.03	.03	.04	.04	----	----	----	----	----	----
.955	-.06	.06	.06	.06	.06	.07	.07	.07	.07	.08	.09	.07	.09	.11	.14	.07	-.02

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(b) $\alpha_o = -1^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.90	0.92
0	0.98	1.01	1.04	1.06	1.07	1.08	1.09	1.09	1.09	1.12	1.13	1.14	1.15	1.17	1.19	1.19	1.21
.006	.55	.54	.56	.58	.59	.60	.61	.61	.62	.63	.64	.65	.66	.67	.70	.78	.68
.016	.25	.24	.26	.27	.28	.29	.30	.30	.30	.32	.32	.34	.34	.36	.39	.39	.39
.027	.11	.10	.11	.12	.11	.12	.13	.13	.13	.15	.14	.16	.16	.18	.21	.21	.22
.051	.03	.02	.03	.03	.02	.04	.04	.03	.03	.04	.03	.05	.05	.06	.09	.09	.09
.080	-.01	-.01	-.01	-.02	-.02	-.01	-.01	-.01	-.02	-.01	-.02	0	-.01	.01	.03	.03	.04
.106	-.05	-.06	-.06	-.07	-.08	-.07	-.08	-.08	-.09	-.09	-.10	-.09	-.09	-.08	-.06	-.06	-.05
.154	-.05	-.06	-.06	-.06	-.07	-.06	-.06	-.07	-.08	-.08	-.09	-.07	-.08	-.07	-.05	-.06	-.06
.199	-.07	-.06	-.07	-.08	-.09	-.08	-.09	-.09	-.10	-.09	-.11	-.10	-.10	-.10	-.08	-.09	-.09
.255	-.09	-.08	-.09	-.10	-.12	-.11	-.11	-.11	-.13	-.12	-.14	-.13	-.14	-.14	-.13	-.14	-.15
.304	-.10	-.09	-.10	-.11	-.12	-.11	-.12	-.12	-.14	-.14	-.15	-.15	-.16	-.16	-.15	-.17	-.17
.351	-.10	-.09	-.10	-.12	-.13	-.12	-.12	-.13	-.14	-.14	-.16	-.16	-.17	-.17	-.16	-.18	-.19
.399	-.11	-.11	-.12	-.14	-.16	-.14	-.15	-.16	-.17	-.17	-.19	-.19	-.21	-.21	-.22	-.24	-.25
.448	-.11	-.11	-.12	-.14	-.15	-.14	-.14	-.15	-.17	-.17	-.19	-.18	-.20	-.21	-.22	-.26	-.30
.502	-.10	-.10	-.11	-.13	-.14	-.12	-.13	-.14	-.15	-.15	-.17	-.17	-.18	-.18	-.18	-.22	-.31
.551	-.09	-.08	-.09	-.10	-.11	-.10	-.10	-.12	-.12	-.12	-.14	-.13	-.14	-.15	-.14	-.17	-.28
.600	-.05	-.06	-.07	-.08	-.09	-.08	-.08	-.09	-.10	-.10	-.11	-.11	-.12	-.12	-.11	-.13	-.24
.655	-.04	-.04	-.05	-.06	-.06	-.06	-.06	-.06	-.07	-.08	-.08	-.08	-.09	-.08	-.08	-.08	-.14
.758	-.02	-.02	-.04	-.05	-.05	-.04	-.04	-.04	-.05	-.05	-.06	-.06	-.06	-.05	-.04	-.01	-.01
.804	.04	.02	.02	.01	.01	.02	.01	.01	0	.01	0	.01	0	.01	.03	.05	.06
.904	.07	.07	.05	.05	.05	.04	.06	.06	.06	.06	.05	.06	.06	.08	.10	.11	.12
.955	.06	.06	.05	.04	.04	.05	.05	.05	.05	.06	.05	.06	.06	.07	.10	.11	.12
1.000	----	.21	.18	.20	.12	.15	.18	.18	.18	.18	.18	.18	.17	.17	.19	.21	.21

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.90	0.92
0.015	-0.40	-0.41	-0.45	-0.48	-0.49	-0.50	-0.52	-0.52	-0.57	-0.58	-0.61	-0.62	-0.64	-0.62	-0.54	-0.47	-0.36
.028	-.32	-.32	-.36	-.38	-.40	-.39	-.42	-.42	-.46	-.47	-.50	-.51	-.54	-.56	-.53	-.46	-.38
.052	-.22	-.21	-.24	-.25	-.26	-.26	-.28	-.28	-.31	-.31	-.32	-.35	-.38	-.40	-.40	-.39	-.26
.080	-.25	-.26	-.31	-.35	-.39	-.39	-.42	-.41	-.44	-.45	-.46	-.46	-.48	-.46	-.39	-.36	-.28
.106	-.20	-.19	-.22	-.23	-.24	-.24	-.25	-.26	-.28	-.28	-.29	-.29	-.31	-.30	-.28	-.26	-.19
.154	-.20	-.20	-.23	-.24	-.26	-.25	-.26	-.27	-.30	-.30	-.32	-.34	-.36	-.38	-.36	-.34	-.28
.204	-.23	-.27	-.23	-.34	-.36	-.36	-.37	-.38	-.41	-.43	-.45	-.46	-.52	-.54	-.53	-.51	-.46
.251	-.20	-.19	-.22	-.24	-.25	-.24	-.26	-.26	-.29	-.30	-.32	-.34	-.37	-.42	-.44	-.43	-.39
.300	-.18	-.16	-.22	-.23	-.24	-.24	-.26	-.26	-.28	-.29	-.32	-.33	----	----	----	----	----
.352	-.18	-.18	-.20	-.22	-.24	-.23	-.24	-.25	-.27	-.28	-.31	-.32	-.35	-.38	-.46	-.47	-.44
.401	-.19	-.18	-.21	-.23	-.24	-.24	-.25	-.26	-.28	-.29	-.32	-.32	----	----	----	----	----
.452	-.16	-.16	-.19	-.20	-.22	-.21	-.22	-.23	-.25	-.26	-.28	-.28	-.31	-.34	-.49	-.55	-.53
.500	-.14	-.14	-.16	-.18	-.18	-.18	-.19	-.20	-.21	-.23	-.24	-.24	----	----	----	----	----
.555	-.12	-.11	-.14	-.15	-.16	-.16	-.16	-.17	-.18	-.19	-.20	-.20	-.22	-.23	-.25	-.55	-.55
.602	-.13	-.13	-.16	-.17	-.18	-.17	-.18	-.18	-.20	-.20	-.21	-.21	----	----	----	----	----
.655	-.10	-.11	-.13	-.14	-.15	-.14	-.16	-.15	-.16	-.16	-.17	-.18	-.18	-.19	-.14	-.44	-.57
.707	-.06	-.08	-.10	-.11	-.13	-.11	-.12	-.12	-.12	-.11	-.12	-.14	----	----	----	----	----
.755	-.03	-.04	-.06	-.06	-.07	-.06	-.07	-.06	-.06	-.06	-.06	-.07	-.07	-.06	-.03	-.07	-.40
.852	.04	.04	.03	.02	.02	.03	.02	.03	.03	.04	.04	.03	.03	.03	.06	.08	-.04
.904	.05	.04	.03	.03	.02	.03	.03	.03	.04	.04	.05	.04	----	----	----	----	----
.955	.07	.07	.06	.06	.06	.07	.07	.07	.08	.08	.09	.09	.08	.09	.12	.15	.10

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(c) $\alpha_o = 0^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.55	0.61	0.63	0.65	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.86	0.89	0.92
0	1.02	1.02	1.06	1.06	1.08	1.09	1.10	1.10	1.12	1.13	1.13	1.14	1.16	1.15	1.18	1.19	1.20
.006	.16	.17	.18	.17	.20	.20	.22	.22	.24	.25	.26	.29	.29	.32	.35	.37	.41
.016	-.02	-.03	-.02	-.05	-.03	-.03	-.02	-.02	-.01	.01	.01	.02	.03	.06	.08	.11	.15
.027	-.10	-.11	-.12	-.14	-.13	-.14	-.13	-.14	-.14	-.12	-.13	-.12	-.12	-.09	-.08	-.06	-.02
.051	-.12	-.14	-.15	-.18	-.17	-.18	-.18	-.18	-.19	-.18	-.20	-.19	-.21	-.18	-.18	-.17	-.14
.080	-.11	-.13	-.14	-.16	-.16	-.17	-.17	-.17	-.18	-.17	-.18	-.18	-.21	-.19	-.19	-.18	-.15
.106	-.15	-.17	-.19	-.22	-.22	-.23	-.24	-.24	-.24	-.24	-.26	-.26	-.28	-.27	-.28	-.28	-.26
.154	-.12	-.13	-.15	-.17	-.17	-.19	-.18	-.18	-.19	-.18	-.20	-.21	-.24	-.23	-.24	-.24	-.24
.199	-.12	-.13	-.15	-.17	-.17	-.18	-.18	-.19	-.20	-.19	-.20	-.21	-.24	-.24	-.25	-.25	-.24
.255	-.12	-.14	-.16	-.18	-.18	-.19	-.19	-.20	-.20	-.20	-.22	-.23	-.27	-.26	-.30	-.31	-.30
.304	-.12	-.14	-.16	-.18	-.18	-.19	-.19	-.20	-.21	-.20	-.22	-.23	-.27	-.27	-.30	-.33	-.32
.351	-.12	-.14	-.16	-.18	-.17	-.18	-.19	-.19	-.21	-.20	-.22	-.23	-.27	-.26	-.30	-.33	-.34
.399	-.14	-.15	-.17	-.20	-.19	-.21	-.20	-.21	-.23	-.22	-.24	-.25	-.30	-.30	-.34	-.38	-.38
.448	-.13	-.14	-.16	-.19	-.18	-.20	-.20	-.20	-.22	-.21	-.23	-.24	-.28	-.28	-.34	-.41	-.43
.502	-.12	-.12	-.14	-.17	-.16	-.18	-.18	-.18	-.19	-.18	-.20	-.21	-.25	-.24	-.29	-.39	-.46
.551	-.10	-.10	-.12	-.14	-.13	-.14	-.14	-.15	-.16	-.16	-.16	-.17	-.20	-.19	-.22	-.31	-.46
.600	-.06	-.07	-.09	-.12	-.11	-.12	-.12	-.12	-.13	-.12	-.13	-.14	-.17	-.15	-.16	-.23	-.44
.655	-.04	-.05	-.06	-.09	-.08	-.09	-.08	-.09	-.10	-.09	-.10	-.10	-.12	-.10	-.10	-.11	-.36
.758	-.02	-.03	-.04	-.07	-.05	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.08	-.05	-.06	-.04	-.08
.804	.03	.03	.01	-.01	0	0	0	0	0	.01	0	.01	0	.01	.01	.02	.04
.904	.07	.08	.06	.04	.06	.04	.06	.06	.06	.06	.06	.07	.06	.08	.09	.10	.13
.955	.07	.07	.06	.03	.06	.04	.05	.06	.06	.06	.06	.08	.06	.09	.09	.10	.14
1.000	.38	.20	.24	.20	.20	.20	.20	.20	.17	.20	.17	.20	.23	.21	.21	.22	.13

Lower surface

x/c \ M	0.31	0.41	0.51	0.55	0.61	0.63	0.65	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.86	0.89	0.92
0.015	-0.07	-0.07	-0.08	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.08	-0.09	-0.08	-0.08	-0.06	-0.05	-0.03	-0.01
.028	-.07	-.08	-.09	-.11	-.10	-.11	-.11	-.11	-.11	-.10	-.11	-.10	-.11	-.09	-.08	-.07	-.05
.052	-.03	-.04	-.05	-.07	-.06	-.08	-.07	-.07	-.07	-.05	-.06	-.06	-.08	-.10	-.04	-.03	0
.080	-.11	-.13	-.16	-.19	-.19	-.20	-.20	-.20	-.21	-.20	-.22	-.22	-.24	-.22	-.21	-.20	-.18
.106	-.06	-.06	-.08	-.09	-.08	-.09	-.09	-.09	-.10	-.09	-.10	-.10	-.12	-.11	-.10	-.08	-.07
.154	-.11	-.10	-.12	-.15	-.14	-.16	-.15	-.16	-.16	-.16	-.17	-.18	-.21	-.20	-.20	-.20	-.19
.204	-.20	-.22	-.26	-.29	-.29	-.30	-.30	-.31	-.32	-.33	-.35	-.36	-.39	-.38	-.37	-.38	-.37
.251	-.11	-.12	-.14	-.16	-.16	-.18	-.17	-.18	-.19	-.18	-.20	-.21	-.25	-.26	-.27	-.28	-.38
.300	-.11	-.12	-.14	-.17	-.16	-.18	-.18	-.18	-.20	-.19	-.21	-.22	----	----	----	----	----
.352	-.11	-.12	-.15	-.17	-.17	-.18	-.18	-.19	-.20	-.20	-.21	-.22	-.27	-.28	-.30	-.30	-.33
.401	-.12	-.13	-.16	-.18	-.18	-.20	-.19	-.20	-.21	-.21	-.22	-.24	----	----	----	----	----
.452	-.11	-.12	-.14	-.17	-.16	-.18	-.18	-.18	-.20	-.19	-.20	-.22	-.26	-.28	-.31	-.37	-.42
.500	-.10	-.10	-.12	-.14	-.14	-.15	-.15	-.15	-.17	-.16	-.17	-.18	----	----	----	----	----
.555	-.07	-.08	-.10	-.12	-.12	-.13	-.13	-.13	-.14	-.14	-.15	-.16	-.19	-.20	-.20	-.24	-.42
.602	-.09	-.10	-.12	-.15	-.14	-.16	-.15	-.16	-.16	-.16	-.16	-.17	----	----	----	----	----
.655	-.07	-.10	-.10	-.12	-.12	-.13	-.13	-.12	-.13	-.13	-.14	-.15	-.16	-.17	-.15	-.12	-.32
.707	-.05	-.07	-.07	-.09	-.09	-.10	-.09	-.09	-.09	-.09	-.10	-.10	----	----	----	----	----
.755	-.01	-.03	-.03	-.05	-.04	-.05	-.05	-.04	-.04	-.04	-.05	-.04	-.04	-.06	-.02	.01	-.01
.852	.06	.04	.05	.03	.04	.04	.04	.05	.05	.06	.05	.06	.06	.04	.08	.12	.11
.904	.05	.04	.04	.03	.04	.03	.04	.05	.05	.05	.05	.07	----	----	----	----	----
.955	.08	.07	.07	.06	.07	.07	.08	.08	.09	.09	.09	.10	.11	.12	.12	.16	.16

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(d) $\alpha_0 = 1^{\circ}$

Upper surface																	
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.74	0.76	0.79	0.81	0.83	0.86	0.90	0.93
0	0.82	0.81	0.84	0.87	0.89	0.90	0.92	0.93	0.95	0.96	0.99	1.01	1.03	1.05	1.09	1.12	1.19
.006	-.30	-.34	-.34	-.32	-.32	-.34	-.32	-.33	-.30	-.30	-.26	-.23	-.18	-.12	-.05	.04	.28
.016	-.32	-.37	-.38	-.37	-.37	-.40	-.40	-.42	-.40	-.41	-.40	-.38	-.34	-.29	-.22	-.15	-.04
.027	-.33	-.37	-.40	-.38	-.40	-.43	-.44	-.47	-.46	-.49	-.49	-.50	-.47	-.42	-.35	-.27	-.17
.051	-.31	-.35	-.37	-.36	-.38	-.41	-.42	-.46	-.46	-.49	-.50	-.55	-.59	-.56	-.48	-.41	-.30
.080	-.24	-.28	-.30	-.29	-.30	-.33	-.34	-.36	-.36	-.39	-.40	-.43	-.49	-.54	-.49	-.43	-.32
.106	-.27	-.32	-.33	-.33	-.34	-.37	-.38	-.40	-.40	-.43	-.44	-.47	-.51	-.57	-.54	-.48	-.39
.154	-.21	-.25	-.25	-.25	-.26	-.28	-.29	-.31	-.32	-.33	-.34	-.37	-.42	-.48	-.51	-.46	-.36
.199	-.20	-.24	-.24	-.24	-.25	-.27	-.28	-.30	-.30	-.31	-.32	-.36	-.39	-.43	-.48	-.45	-.35
.255	-.19	-.23	-.24	-.24	-.24	-.26	-.27	-.29	-.29	-.31	-.32	-.35	-.40	-.43	-.50	-.47	-.39
.304	-.19	-.22	-.23	-.22	-.23	-.26	-.26	-.28	-.28	-.30	-.31	-.34	-.38	-.40	-.52	-.49	-.42
.351	-.18	-.21	-.22	-.21	-.22	-.24	-.26	-.27	-.27	-.28	-.30	-.32	-.36	-.39	-.52	-.52	-.45
.399	-.19	-.22	-.23	-.22	-.23	-.25	-.26	-.28	-.28	-.30	-.32	-.34	-.39	-.42	-.52	-.55	-.49
.448	-.18	-.20	-.22	-.22	-.21	-.24	-.24	-.26	-.27	-.28	-.29	-.32	-.35	-.39	-.51	-.60	-.54
.502	-.16	-.18	-.19	-.19	-.18	-.21	-.21	-.23	-.23	-.24	-.25	-.27	-.30	-.30	-.42	-.62	-.57
.551	-.13	-.15	-.16	-.15	-.15	-.17	-.18	-.19	-.19	-.19	-.20	-.21	-.23	-.22	-.26	-.59	-.57
.600	-.10	-.13	-.13	-.12	-.12	-.14	-.14	-.15	-.15	-.15	-.16	-.17	-.18	-.17	-.16	-.56	-.57
.655	-.07	-.10	-.10	-.09	-.09	-.10	-.10	-.12	-.12	-.11	-.12	-.13	-.14	-.13	-.10	-.46	-.57
.758	.02	-.07	-.07	-.06	-.06	-.07	-.07	-.08	-.08	-.08	-.09	-.09	-.10	-.08	-.05	-.14	-.44
.804	.07	-.01	-.01	0	.01	-.01	-.01	-.02	-.02	-.01	-.02	-.02	-.02	-.02	.01	0	-.28
.904	.06	.04	.04	.05	.06	.05	.05	.04	.05	.06	.05	.05	.05	.06	.08	.11	0
.955	.07	.04	.04	.05	.07	.06	.05	.05	.06	.06	.06	.06	.07	.07	.10	.14	.08
1.000	.30	.17	.24	.22	.21	.21	.19	.18	.18	.18	.18	.18	.18	.17	.09	.21	.18
Lower surface																	
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.69	0.71	0.74	0.76	0.79	0.81	0.83	0.86	0.90	0.93
0.015	0.20	0.19	0.21	0.22	0.23	0.23	0.24	0.24	0.24	0.25	0.25	0.26	0.25	0.26	0.28	0.29	0.27
.028	.14	.13	.14	.14	.16	.15	.16	.16	.16	.17	.16	.18	.16	.18	.20	.21	.20
.052	.11	.10	.20	.12	.12	.19	.13	.13	.12	.14	.14	.14	.13	.15	.16	.17	.17
.080	-.01	-.03	-.04	-.04	-.04	-.05	-.04	-.05	-.05	-.05	-.05	-.05	-.06	-.05	-.03	-.02	-.02
.106	.04	.03	.03	.04	.05	.04	.05	.05	.04	.05	.05	.05	.04	.04	.06	.07	.07
.154	-.02	-.04	-.04	-.03	-.03	-.04	-.04	-.04	-.05	-.04	-.04	-.05	-.07	-.05	-.04	-.04	-.04
.204	-.13	-.16	-.19	-.19	-.18	-.20	-.20	-.20	-.21	-.21	-.22	-.23	-.25	-.24	-.24	-.24	-.24
.251	-.05	-.07	-.08	-.07	-.07	-.08	-.08	-.08	-.10	-.10	-.10	-.11	-.13	-.12	-.12	-.12	-.14
.300	-.06	-.08	-.09	-.08	-.08	-.10	-.10	-.10	-.11	-.11	-.12	-.13	-.15	----	----	----	----
.352	-.07	-.09	-.10	-.10	-.10	-.11	-.11	-.11	-.13	-.13	-.14	-.15	-.17	-.17	-.17	-.19	-.19
.401	-.10	-.11	-.18	-.11	-.11	-.13	-.13	-.13	-.14	-.15	-.15	-.17	-.20	----	----	----	----
.452	-.09	-.10	-.11	-.10	-.10	-.12	-.12	-.12	-.13	-.14	-.14	-.16	-.18	-.18	-.19	-.22	-.30
.500	-.06	-.08	-.09	-.08	-.09	-.10	-.10	-.09	-.12	-.11	-.12	-.14	-.16	----	----	----	----
.555	-.03	-.06	-.08	-.07	-.07	-.09	-.08	-.08	-.10	-.10	-.10	-.12	-.14	-.13	-.13	-.12	-.27
.602	-.07	-.09	-.10	-.10	-.10	-.11	-.11	-.10	-.12	-.12	-.13	-.14	-.16	----	----	----	----
.655	-.06	-.08	-.09	-.09	-.07	-.09	-.09	-.09	-.09	-.10	-.11	-.11	-.13	-.12	-.12	-.12	-.18
.707	-.04	-.06	-.07	-.06	-.05	-.06	-.06	-.07	-.06	-.06	-.07	-.08	-.09	----	----	----	----
.755	.02	-.01	-.02	-.01	.01	-.02	-.01	-.02	-.01	-.01	-.02	-.02	-.02	-.03	-.01	0	.01
.852	.10	.06	.06	.07	.09	.06	.07	.07	.08	.08	.07	.08	.08	.07	.09	.11	.11
.904	.06	.05	.04	.03	.07	.05	.06	.06	.07	.07	.07	.07	.08	----	----	----	----
.955	.10	.07	.07	.08	.11	.08	.09	.09	.10	.10	.10	.11	.11	.10	.12	.14	.14

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(e) $\alpha_o = 2^o$

Upper surface																	
x/c \ M	0.30	0.41	0.51	0.55	0.60	0.64	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.91	0.93
0	0.22	0.27	0.32	0.35	0.42	0.46	0.49	0.53	0.57	0.63	0.68	0.76	0.79	0.83	0.91	1.02	1.10
.006	-.88	-.87	-.94	-.99	-1.00	-1.01	-1.02	-1.02	-1.00	-.94	-.84	-.74	-.65	-.54	-.38	-.18	-.02
.016	-.68	-.68	-.74	-.79	-.82	-.85	-.88	-.90	-.91	-.88	-.81	-.72	-.66	-.58	-.45	-.29	-.17
.027	-.60	-.60	-.67	-.71	-.73	-.77	-.80	-.84	-.89	-.90	-.85	-.77	-.72	-.64	-.52	-.36	-.28
.051	-.51	-.51	-.56	-.61	-.62	-.66	-.69	-.72	-.77	-.90	-.94	-.87	-.82	-.76	-.64	-.48	-.40
.080	-.39	-.40	-.44	-.46	-.47	-.51	-.52	-.54	-.58	-.70	-.82	-.88	-.84	-.78	-.67	-.52	-.44
.106	-.37	-.38	-.42	-.45	-.46	-.49	-.51	-.52	-.54	-.57	-.75	-.86	-.84	-.79	-.68	-.54	-.46
.154	-.30	-.30	-.34	-.36	-.36	-.39	-.40	-.41	-.42	-.44	-.41	-.76	-.82	-.77	-.67	-.54	-.47
.199	-.28	-.28	-.31	-.34	-.34	-.36	-.37	-.39	-.39	-.42	-.39	-.57	-.80	-.77	-.68	-.55	-.48
.255	-.26	-.26	-.29	-.32	-.32	-.34	-.35	-.36	-.37	-.40	-.40	-.37	-.73	-.77	-.69	-.57	-.50
.305	-.25	-.25	-.28	-.30	-.30	-.32	-.33	-.35	-.35	-.38	-.40	-.34	-.58	-.77	-.70	-.57	-.51
.351	-.23	-.23	-.26	-.29	-.28	-.30	-.32	-.33	-.33	-.36	-.37	-.35	-.44	-.78	-.71	-.60	-.53
.399	-.24	-.23	-.27	-.29	-.28	-.31	-.32	-.33	-.34	-.37	-.38	-.38	-.33	-.78	-.74	-.63	-.57
.448	-.22	-.22	-.25	-.27	-.26	-.28	-.29	-.30	-.31	-.34	-.34	-.35	-.30	-.74	-.78	-.68	-.62
.502	-.19	-.19	-.22	-.24	-.23	-.25	-.25	-.26	-.26	-.29	-.30	-.30	-.26	-.52	-.81	-.71	-.65
.551	-.16	-.15	-.18	-.20	-.19	-.20	-.21	-.22	-.22	-.24	-.24	-.24	-.22	-.27	-.79	-.72	-.66
.600	-.13	-.12	-.15	-.16	-.16	-.17	-.17	-.19	-.18	-.20	-.20	-.19	-.18	-.16	-.75	-.73	-.67
.655	-.10	-.10	-.12	-.13	-.12	-.14	-.14	-.15	-.16	-.16	-.16	-.14	-.14	-.09	-.60	-.70	-.65
.758	-.07	-.06	-.08	-.09	-.08	-.09	-.10	-.10	-.10	-.11	-.10	-.09	-.09	-.05	-.17	-.54	-.63
.804	-.03	-.01	-.04	-.05	-.03	-.04	-.04	-.05	-.05	-.05	-.05	-.04	-.04	-.01	-.08	-.34	-.56
.904	.03	.05	.04	.03	.04	.04	.04	.03	.04	.04	.04	.06	.06	.07	.08	-.08	-.24
.955	.05	.07	.05	.04	.06	.06	.05	.05	.06	.06	.06	.08	.08	.09	.13	-.01	-.08
1.000	.25	.19	.14	.12	.12	.12	.11	.11	.12	.12	.12	.14	.14	.14	.16	.10	-.01
Lower surface																	
x/c \ M	0.30	0.41	0.51	0.55	0.60	0.64	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.84	0.87	0.91	0.93
0.015	0.43	0.43	0.45	0.46	0.46	0.47	0.47	0.48	0.48	0.46	0.49	0.50	0.50	0.50	0.48	0.44	0.39
.028	.26	.32	.34	.35	.35	.35	.36	.36	.37	.37	.38	.38	.39	.39	.38	.34	.30
.052	.24	.23	.25	.27	.26	.25	.27	.27	.28	.28	.29	.30	.30	.31	.30	.28	.25
.080	.16	.15	.16	.17	.17	.17	.18	.17	.18	.18	.19	.20	.20	.22	.21	.18	.16
.106	.11	.10	.12	.12	.12	.12	.13	.12	.13	.13	.14	.15	.15	.15	.15	.12	.11
.154	.06	.05	.06	.06	.06	.06	.06	.06	.06	.06	.07	.07	.07	.08	.08	.05	.04
.204	.02	.01	.02	.01	.01	.02	.01	.01	.02	.01	.02	.02	.02	.01	.02	-.01	-.05
.251	.01	0	0	0	-.01	-.01	-.01	-.02	-.01	-.02	-.02	-.01	-.01	-.01	-.02	-.05	-.08
.300	0	-.02	-.02	-.02	-.03	-.03	-.02	-.02	-.03	-.04	-.04	-.03	-.04	-.04	----	----	----
.352	-.02	-.02	-.04	-.04	-.05	-.05	-.05	-.06	-.06	-.07	-.06	-.06	-.07	-.07	-.08	-.12	-.16
.401	-.04	-.06	-.06	-.06	-.08	-.07	-.08	-.08	-.08	-.09	-.09	-.09	-.10	-.08	----	----	----
.452	-.03	-.06	-.06	-.06	-.08	-.07	-.07	-.08	-.08	-.09	-.09	-.08	-.10	-.10	-.11	-.18	-.26
.500	-.03	-.05	-.05	-.05	-.07	-.06	-.06	-.07	-.06	-.08	-.07	-.08	-.09	-.08	----	----	----
.555	-.03	-.04	-.04	-.04	-.06	-.05	-.05	-.06	-.05	-.06	-.06	-.06	-.07	-.06	-.08	-.14	-.24
.602	-.02	-.04	-.04	-.04	-.06	-.04	-.05	-.06	-.05	-.07	-.06	-.06	-.06	-.06	----	----	----
.655	-.04	-.04	-.05	-.06	-.06	-.05	-.06	-.06	-.06	-.06	-.06	-.06	-.07	-.08	-.06	-.11	-.20
.707	-.02	-.02	-.03	-.04	-.04	-.03	-.03	-.04	-.04	-.03	-.04	-.04	-.03	-.05	----	----	----
.755	0	0	0	-.02	-.01	0	-.01	-.01	-.01	-.01	-.01	-.01	-.01	-.03	-.01	-.04	-.15
.852	.04	.03	.04	.02	.03	.05	.05	.05	.05	.06	.07	.08	.08	.09	.11	.12	.10
.904	.04	.05	.05	.05	.06	.07	.07	.08	.08	.09	.09	.10	.10	.10	----	----	----
.955	.06	.07	.08	.07	.08	.10	.10	.10	.10	.11	.11	.12	.12	.12	.12	.11	.05

NACA

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(f) $\alpha_0 = 4^\circ$

Upper surface															
x/c \ M	0.31	0.41	0.51	0.56	0.60	0.63	0.66	0.69	0.71	0.74	0.76	0.80	0.83	0.85	0.87
0	-1.72	-1.48	-0.95	-0.71	-0.49	-0.36	-0.24	-0.11	0.01	0.12	0.21	0.33	0.46	0.58	0.69
.006	-2.05	-2.92	-2.57	-2.56	-2.40	-2.38	-2.38	-2.12	-1.94	-1.77	-1.59	-1.38	-1.14	-.97	-.77
.016	-1.49	-1.67	-2.05	-2.26	-2.37	-2.30	-2.18	-1.95	-1.80	-1.65	-1.49	-1.29	-1.07	-.91	-.74
.027	-1.11	-1.20	-1.38	-1.56	-1.88	-2.16	-2.00	-1.82	-1.69	-1.56	-1.41	-1.24	-1.04	-.91	-.76
.051	-.89	-.96	-1.03	-1.14	-1.21	-1.73	-1.86	-1.76	-1.68	-1.56	-1.43	-1.27	-1.08	-.96	-.82
.080	-.67	-.72	-.75	-.81	-.83	-.82	-1.11	-1.62	-1.59	-1.51	-1.38	-1.24	-1.07	-.96	-.84
.106	-.62	-.66	-.69	-.72	-.76	-.76	-.74	-1.33	-1.54	-1.50	-1.38	-1.25	-1.08	-.98	-.87
.154	-.50	-.52	-.55	-.57	-.58	-.61	-.58	-.56	-1.28	-1.43	-1.33	-1.21	-1.05	-.95	-.84
.199	-.44	-.47	-.49	-.51	-.52	-.55	-.54	-.48	-.62	-1.37	-1.30	-1.18	-1.03	-.94	-.84
.255	-.39	-.42	-.43	-.45	-.46	-.50	-.49	-.45	-.39	-1.07	-1.27	-1.18	-1.04	-.95	-.86
.305	-.37	-.39	-.40	-.42	-.43	-.46	-.46	-.43	-.38	-.56	-1.18	-1.17	-1.03	-.94	-.85
.351	-.34	-.36	-.36	-.38	-.39	-.42	-.42	-.40	-.38	-.37	-.83	-1.17	-1.03	-.95	-.86
.399	-.32	-.35	-.35	-.37	-.38	-.41	-.41	-.40	-.39	-.31	-.47	-1.16	-1.04	-.96	-.88
.448	-.29	-.32	-.32	-.34	-.36	-.33	-.37	-.36	-.36	-.31	-.31	-1.06	-1.07	-1.00	-.92
.502	-.25	-.28	-.28	-.29	-.30	-.32	-.33	-.31	-.32	-.29	-.21	-.63	-1.00	-1.01	-.95
.551	-.22	-.26	-.24	-.25	-.24	-.27	-.27	-.26	-.26	-.24	-.16	-.52	-.77	-.90	-.96
.600	-.18	-.20	-.20	-.21	-.21	-.23	-.23	-.22	-.22	-.21	-.15	-.43	-.58	-.76	-.94
.655	-.15	-.16	-.16	-.16	-.16	-.18	-.19	-.18	-.18	-.17	-.12	-.24	-.50	-.55	-.86
.758	-.11	-.11	-.11	-.11	-.10	-.12	-.12	-.19	-.12	-.12	-.08	-.04	-.35	-.43	-.50
.804	-.06	-.07	-.06	-.06	-.06	-.07	-.07	-.07	-.06	-.07	-.03	.01	-.24	-.39	-.43
.904	.02	.01	.02	.01	.02	.02	.02	.02	.02	.03	.05	.07	-.04	-.22	-.38
.955	.03	.03	.04	.04	.05	.04	.04	.05	.05	.06	.07	.08	.02	-.14	-.32
1.000	.29	.18	.14	.11	.12	.12	.12	.12	.11	.13	.13	.13	.06	-.03	-.18
Lower surface															
x/c \ M	0.31	0.41	0.51	0.56	0.60	0.63	0.66	0.69	0.71	0.74	0.76	0.80	0.83	0.85	0.87
0.015	0.76	0.77	0.77	0.77	0.79	0.77	0.77	0.77	0.77	0.77	0.78	0.75	0.74	0.71	0.66
.028	.62	.62	.62	.63	.64	.64	.63	.64	.64	.64	.64	.63	.62	.59	.54
.052	.48	.48	.47	.49	.49	.49	.50	.50	.51	.51	.52	.51	.51	.46	.44
.080	.36	.35	.36	.36	.37	.37	.37	.38	.39	.38	.41	.39	.39	.37	.32
.106	.29	.29	.30	.30	.30	.30	.31	.32	.32	.32	.34	.32	.33	.31	.26
.154	.21	.21	.22	.22	.23	.22	.21	.23	.24	.22	.25	.24	.24	.22	.17
.204	.15	.14	.15	.14	.15	.15	.14	.15	.16	.15	.17	.16	.16	.14	.09
.251	.12	.12	.12	.12	.13	.12	.12	.13	.13	.13	.15	.14	.13	.11	.06
.300	.09	.09	.09	.09	.10	.09	.08	.10	.10	.09	.11	.10	.10	----	----
.352	.07	.06	.06	.06	.06	.05	.05	.06	.06	.05	.07	.06	.06	.03	-.03
.401	.04	.03	.03	.03	.03	.02	.02	.03	.03	.02	.04	.02	.02	----	----
.452	.04	.03	.03	.02	.02	.01	.01	.02	.02	.02	.03	.02	.01	-.02	-.10
.500	.04	.03	.02	.02	.02	.01	.01	.02	.02	.01	.03	.02	.01	----	----
.555	.04	.03	.03	.03	.03	.02	.01	.02	.02	.02	.04	.02	.01	-.02	-.09
.602	.03	.02	.02	.02	.02	.01	0	.02	.02	0	.03	.01	0	----	----
.655	.01	-.01	-.01	-.01	-.01	-.01	-.01	0	0	0	0	0	-.01	-.04	-.12
.707	.02	.01	.01	0	0	.01	.01	.01	.01	.01	.02	.02	.01	----	----
.755	.03	.03	.03	.03	.03	.02	.03	.04	.04	.04	.05	.05	.04	0	-.06
.852	.05	.06	.06	.05	.06	.06	.06	.07	.07	.07	.08	.08	.07	.08	.02
.904	.06	.06	.06	.06	.06	.07	.06	.07	.07	.08	.08	.09	.07	----	----
.955	.06	.07	.07	.06	.07	.07	.07	.08	.08	.09	.10	.11	.08	.03	-.05

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(g) $\alpha_o = 6^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.53	0.56	0.58	0.61	0.64	0.66	0.69	0.71	0.74	0.76	0.80	0.83	0.86
0	-1.23	-1.27	-1.16	-1.08	-0.93	-0.93	-0.78	-0.65	-0.52	-0.39	-0.27	-0.15	-0.01	0.19	0.34	0.47
.006	-1.49	-1.66	-1.86	-1.92	-1.99	-1.99	-1.96	-2.09	-2.34	-2.34	-2.20	-2.03	-1.85	-1.62	-1.38	-1.17
.016	-1.49	-1.67	-1.85	-1.88	-1.94	-1.94	-1.92	-2.01	-2.26	-2.19	-2.05	-1.89	-1.72	-1.52	-1.30	-1.09
.027	-1.50	-1.69	-1.84	-1.85	-1.88	-1.88	-1.83	-1.88	-2.16	-2.05	-1.94	-1.78	-1.63	-1.43	-1.23	-1.05
.051	-1.50	-1.68	-1.75	-1.76	-1.78	-1.78	-1.72	-1.71	-1.95	-1.91	-1.86	-1.76	-1.61	-1.43	-1.25	-1.08
.080	-1.44	-1.54	-1.53	-1.50	-1.54	-1.54	-1.49	-1.47	-1.51	-1.70	-1.76	-1.68	-1.55	-1.38	-1.21	-1.06
.106	-1.31	-1.32	-1.34	-1.34	-1.39	-1.39	-1.36	-1.33	-1.26	-1.60	-1.74	-1.67	-1.54	-1.38	-1.22	-1.08
.154	-.99	-.92	-1.02	-1.04	-1.10	-1.10	-1.10	-1.09	-1.01	-1.28	-1.50	-1.60	-1.48	-1.34	-1.18	-1.04
.199	-.75	-.71	-.81	-.85	-.91	-.91	-.92	-.93	-.91	-.96	-1.48	-1.57	-1.46	-1.32	-1.17	-1.04
.255	-.53	-.56	-.64	-.66	-.72	-.72	-.75	-.75	-.78	-.74	-1.08	-1.53	-1.44	-1.30	-1.16	-1.04
.305	-.44	-.48	-.55	-.57	-.62	-.62	-.62	-.63	-.64	-.64	-.79	-1.40	-1.40	-1.22	-1.14	-1.03
.351	-.37	-.43	-.48	-.49	-.54	-.54	-.54	-.55	-.60	-.58	-.64	-.98	-1.28	-1.04	-1.07	-1.04
.399	-.35	-.39	-.42	-.44	-.48	-.48	-.47	-.48	-.52	-.53	-.49	-.82	-.94	-.83	-.88	-1.03
.448	-.30	-.35	-.38	-.39	-.43	-.43	-.41	-.42	-.46	-.48	-.40	-.70	-.79	-.73	-.70	-.97
.502	-.27	-.30	-.31	-.33	-.36	-.36	-.35	-.36	-.39	-.41	-.34	-.48	-.74	-.70	-.62	-.77
.551	-.22	-.25	-.26	-.28	-.32	-.32	-.30	-.30	-.32	-.35	-.30	-.33	-.61	-.69	-.60	-.62
.600	-.19	-.22	-.23	-.24	-.28	-.27	-.26	-.26	-.28	-.30	-.26	-.24	-.48	-.67	-.60	-.57
.655	-.15	-.18	-.18	-.20	-.23	-.24	-.21	-.21	-.30	-.25	-.22	-.18	-.34	-.62	-.59	-.55
.758	-.09	-.12	-.12	-.13	-.16	-.16	-.14	-.14	-.16	-.17	-.16	-.11	-.16	-.44	-.54	-.54
.804	-.06	-.08	-.08	-.09	-.12	-.12	-.11	-.11	-.13	-.13	-.12	-.07	-.11	-.35	-.49	-.54
.904	.02	-.01	-.01	-.03	-.06	-.06	-.04	-.04	-.06	-.06	-.04	0	-.03	-.18	-.36	-.52
.955	.04	.01	.01	0	-.03	-.03	-.02	-.02	-.04	-.02	-.01	.02	-.01	-.12	-.28	-.48
1.000	.20	.10	.10	.09	.05	.05	.03	.01	-.01	.02	.05	.08	.06	-.03	-.15	-.33

Lower surface

x/c \ M	0.31	0.41	0.51	0.53	0.56	0.58	0.61	0.64	0.66	0.69	0.71	0.74	0.76	0.80	0.83	0.86
0.015	0.90	0.90	0.93	0.90	0.89	0.90	0.91	0.90	0.89	0.91	0.90	0.91	0.89	0.89	0.85	0.82
.028	.76	.77	.79	.78	.76	.77	.77	.78	.76	.78	.78	.78	.76	.74	.72	.70
.052	.61	.62	.63	.62	.61	.61	.62	.62	.61	.63	.63	.64	.63	.61	.60	.58
.080	.49	.49	.50	.48	.48	.48	.49	.49	.48	.50	.51	.52	.50	.49	.47	.46
.106	.41	.42	.42	.41	.40	.41	.42	.42	.42	.43	.44	.44	.43	.42	.40	.39
.154	.33	.32	.32	.31	.31	.31	.32	.33	.32	.33	.34	.34	.34	.32	.31	.30
.204	.25	.25	.24	.22	.22	.22	.24	.24	.23	.25	.25	.26	.25	.23	.23	.21
.251	.22	.22	.21	.20	.19	.19	.20	.21	.20	.21	.22	.23	.22	.20	.19	.17
.300	.18	.18	.16	.15	.15	.15	.16	.16	.16	.17	.18	.19	.17	.15	.14	---
.352	.15	.14	.13	.11	.11	.11	.12	.13	.12	.12	.13	.14	.12	.10	.10	.07
.401	.11	.11	.10	.08	.08	.07	.09	.09	.07	.09	.09	.10	.08	.06	.05	---
.452	.10	.09	.08	.06	.06	.05	.07	.07	.06	.06	.08	.08	.06	.04	.04	0
.500	.09	.08	.07	.06	.05	.04	.06	.06	.05	.06	.06	.07	.06	.03	.02	---
.555	.09	.08	.07	.05	.04	.04	.06	.06	.04	.05	.06	.07	.05	.02	.02	-.03
.602	.08	.06	.04	.04	.02	.02	.03	.04	.02	.03	.04	.05	.03	0	-.01	---
.655	.05	.02	.02	.03	.02	.02	0	.02	.01	.01	.03	.02	.01	-.01	-.04	-.08
.707	.05	.03	.03	.03	.02	.03	.01	.03	.02	.02	.04	.03	.02	-.01	-.02	---
.755	.07	.05	.04	.05	.04	.04	.03	.04	.04	.04	.06	.05	.04	.02	.01	-.05
.852	.08	.06	.06	.07	.06	.05	.04	.06	.06	.06	.07	.07	.06	.04	.02	0
.904	.08	.05	.05	.05	.04	.04	.03	.04	.04	.05	.07	.06	.05	.02	-.01	---
.955	.07	.04	.04	.05	.04	.03	.02	.04	.03	.04	.06	.06	.05	.01	-.06	-.12

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(h) $\alpha_o = 8^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.53	0.56	0.59	0.61	0.64	0.66	0.69	0.72	0.75	0.78	0.81	0.84
0	-1.60	-1.56	-1.35	-1.24	-1.12	-1.00	-0.89	-0.77	-0.67	-0.51	-0.36	-0.21	-0.05	-0.01	0.18
.006	-1.52	-1.59	-1.65	-1.58	-1.55	-1.56	-1.56	-1.57	-1.63	-1.71	-1.80	-1.66	-1.61	-1.66	-1.53
.016	-1.54	-1.60	-1.65	-1.58	-1.56	-1.55	-1.54	-1.54	-1.59	-1.65	-1.74	-1.49	-1.45	-1.57	-1.44
.027	-1.55	-1.61	-1.66	-1.58	-1.56	-1.56	-1.54	-1.53	-1.57	-1.59	-1.66	-1.44	-1.36	-1.50	-1.36
.051	-1.51	-1.59	-1.61	-1.55	-1.51	-1.50	-1.49	-1.48	-1.52	-1.50	-1.52	-1.31	-1.24	-1.49	-1.36
.080	-1.36	-1.48	-1.40	-1.36	-1.33	-1.31	-1.29	-1.28	-1.28	-1.28	-1.26	-.99	-1.03	-1.44	-1.31
.106	-1.27	-1.31	-1.26	-1.23	-1.23	-1.22	-1.22	-1.22	-1.22	-1.19	-1.17	-.93	-.87	-1.45	-1.33
.154	-1.08	-1.06	-1.07	-1.06	-1.09	-1.08	-1.10	-1.10	-1.09	-1.04	.98	-.80	-.75	-1.36	-1.27
.199	-.99	-.92	-.96	-.95	-.99	-.99	-.99	-1.02	-1.01	-.96	-.89	-.76	-.71	-1.33	-1.26
.225	-.88	-.83	-.88	-.86	-.89	-.88	-.90	-.91	-.92	-.88	-.82	-.72	-.63	-1.26	-1.25
.305	-.78	-.76	-.80	-.78	-.81	-.80	-.81	-.82	-.84	-.81	-.76	-.70	-.60	-1.12	-1.22
.351	-.71	-.69	-.74	-.72	-.74	-.75	-.74	-.76	-.79	-.77	-.75	-.69	-.60	-.98	-1.14
.399	-.62	-.62	-.67	-.65	-.67	-.66	-.67	-.69	-.72	-.72	-.69	-.67	-.60	-.84	-.98
.448	-.53	-.55	-.60	-.58	-.60	-.60	-.61	-.63	-.66	-.67	-.65	-.66	-.61	-.78	-.85
.502	-.46	-.47	-.53	-.51	-.53	-.54	-.54	-.56	-.60	-.62	-.62	-.65	-.61	-.73	-.76
.551	-.39	-.40	-.46	-.44	-.46	-.47	-.49	-.50	-.54	-.56	-.57	-.64	-.61	-.68	-.72
.600	-.34	-.36	-.42	-.40	-.42	-.42	-.44	-.45	-.50	-.53	-.54	-.62	-.61	-.64	-.71
.655	-.28	-.31	-.35	-.34	-.37	-.38	-.39	-.40	-.45	-.48	-.50	-.60	-.61	-.60	-.70
.758	-.20	-.22	-.27	-.25	-.29	-.29	-.32	-.33	-.37	-.40	-.43	-.54	-.60	-.50	-.65
.804	-.18	-.19	-.23	-.22	-.25	-.26	-.28	-.30	-.33	-.36	-.39	-.51	-.58	-.46	-.62
.904	-.11	-.13	-.16	-.14	-.19	-.19	-.21	-.24	-.26	-.29	-.32	-.44	-.53	-.37	-.54
.955	-.09	-.11	-.13	-.12	-.16	-.16	-.18	-.20	-.24	-.26	-.28	-.40	-.50	-.32	-.48
1.000	.10	.03	-.02	-.04	-.06	-.06	-.10	-.23	-.17	-.18	-.22	-.32	-.38	-.25	-.36

Lower surface

x/c \ M	0.31	0.41	0.51	0.53	0.56	0.59	0.61	0.64	0.66	0.69	0.72	0.75	0.78	0.81	0.84
0.015	0.95	0.95	0.98	0.98	0.97	0.97	0.97	0.96	0.96	0.94	0.97	0.95	0.96	0.97	0.93
.028	.84	.85	.86	.86	.85	.85	.85	.84	.84	.83	.85	.83	.84	.86	.82
.052	.70	.70	.71	.71	.70	.70	.70	.68	.68	.68	.70	.68	.69	.72	.68
.080	.56	.56	.58	.58	.56	.56	.56	.54	.55	.55	.56	.55	.56	.59	.56
.106	.49	.48	.50	.50	.49	.49	.49	.45	.48	.48	.49	.48	.48	.52	.48
.154	.38	.38	.40	.40	.38	.39	.38	.37	.37	.38	.38	.38	.38	.41	.38
.204	.30	.29	.32	.31	.30	.30	.30	.28	.28	.28	.29	.29	.29	.32	.29
.251	.26	.25	.28	.25	.25	.26	.25	.24	.24	.24	.25	.25	.24	.27	.24
.300	.22	.20	.23	.22	.21	.21	.20	.18	.18	.19	.20	.20	.20	----	----
.352	.18	.16	.19	.18	.16	.16	.16	.14	.14	.13	.14	.14	.14	.17	.14
.401	.14	.12	.14	.14	.12	.12	.11	.10	.09	.09	.09	.09	.08	----	----
.452	.12	.10	.12	.11	.10	.10	.09	.08	.07	.06	.07	.07	.06	.09	.04
.500	.11	.09	.11	.10	.08	.08	.08	.06	.05	.05	.06	.05	.04	----	----
.555	.11	.08	.10	.09	.06	.08	.06	.05	.04	.03	.04	.04	.03	.02	.01
.602	.08	.05	.08	.07	.04	.04	.04	.02	0	0	.02	0	-.01	----	----
.655	.04	.03	.02	.01	0	0	0	0	-.02	-.02	-.03	-.03	-.04	-.02	-.06
.707	.03	.03	.01	.01	0	0	0	0	-.02	-.02	-.03	-.04	-.05	----	----
.755	.05	.04	.03	.01	.02	.02	.01	.01	-.01	0	-.02	-.02	-.04	-.01	-.03
.822	.05	.04	.03	.01	.01	.02	.01	0	-.01	-.01	-.02	-.04	-.05	-.02	0
.904	.02	.01	-.01	-.01	-.02	-.02	-.03	-.03	-.05	-.05	-.06	-.08	-.11	----	----
.955	0	-.01	-.03	-.02	-.05	-.05	-.06	-.07	-.09	-.09	-.11	-.14	-.18	-.10	-.15

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(i) $\alpha_o = 10^\circ$

Upper surface														
x/c \ M	0.31	0.41	0.52	0.54	0.56	0.59	0.61	0.65	0.67	0.70	0.72	0.75	0.79	0.81
0	-0.87	-1.10	-1.26	-1.22	-1.20	-1.10	-1.02	-0.88	-0.74	-0.60	-0.47	-0.40	-0.18	-0.07
.006	-.82	-1.10	-1.37	-1.38	-1.46	-1.48	-1.54	-1.54	-1.59	-1.59	-1.60	-1.60	-1.52	-1.34
.016	-.82	-1.10	-1.39	-1.40	-1.48	-1.48	-1.51	-1.51	-1.50	-1.45	-1.38	-1.35	-1.31	-1.22
.027	-.83	-1.12	-1.42	-1.43	-1.51	-1.52	-1.55	-1.54	-1.55	-1.52	-1.47	-1.39	-1.26	-1.14
.051	-.84	-1.14	-1.40	-1.40	-1.47	-1.46	-1.48	-1.45	-1.47	-1.46	-1.44	-1.37	-1.21	-1.08
.080	-.83	-1.01	-1.12	-1.10	-1.05	-.95	-.90	-.90	-.81	-.70	-.69	-.65	-.61	-.81
.106	-.80	-.90	-.98	-.96	-.93	-.86	-.83	-.82	-.75	-.66	-.63	-.61	-.57	-.70
.154	-.82	-.85	-.86	-.86	-.83	-.78	-.76	-.76	-.71	-.64	-.63	-.59	-.56	-.66
.199	-.83	-.82	-.81	-.80	-.77	-.73	-.72	-.74	-.70	-.64	-.63	-.59	-.55	-.65
.255	-.83	-.80	-.80	-.78	-.76	-.72	-.71	-.72	-.70	-.65	-.63	-.60	-.56	-.64
.304	-.81	-.78	-.79	-.76	-.74	-.71	-.70	-.71	-.70	-.65	-.63	-.60	-.56	-.64
.351	-.79	-.75	-.76	-.74	-.74	-.71	-.70	-.71	-.70	-.65	-.63	-.60	-.56	-.64
.399	-.77	-.72	-.74	-.72	-.72	-.70	-.69	-.70	-.70	-.66	-.64	-.61	-.57	-.63
.448	-.73	-.68	-.71	-.70	-.70	-.68	-.68	-.69	-.69	-.66	-.64	-.62	-.58	-.63
.502	-.68	-.64	-.68	-.66	-.68	-.67	-.67	-.68	-.68	-.65	-.65	-.63	-.59	-.63
.551	-.64	-.59	-.65	-.63	-.65	-.64	-.65	-.66	-.67	-.64	-.65	-.64	-.61	-.63
.600	-.58	-.56	-.62	-.60	-.63	-.62	-.64	-.64	-.66	-.64	-.64	-.65	-.62	-.64
.655	-.54	-.51	-.58	-.57	-.60	-.60	-.62	-.63	-.65	-.64	-.65	-.65	-.62	-.65
.758	-.47	-.43	-.50	-.50	-.63	-.53	-.56	-.58	-.62	-.61	-.64	-.65	-.63	-.67
.804	-.42	-.39	-.46	-.46	-.49	-.50	-.53	-.54	-.59	-.60	-.62	-.65	-.63	-.67
.904	-.34	-.31	-.38	-.38	-.42	-.42	-.46	-.48	-.53	-.54	-.58	-.62	-.63	-.66
.955	-.30	-.27	-.34	-.34	-.38	-.38	-.42	-.44	-.49	-.50	-.54	-.60	-.60	-.64
1.000	.01	-.09	-.23	-.26	-.28	-.29	-.33	-.37	-.42	-.43	-.45	-.49	-.48	-.54
Lower surface														
x/c \ M	0.31	0.41	0.52	0.54	0.56	0.59	0.61	0.65	0.67	0.70	0.72	0.75	0.79	0.81
0.015	0.95	1.00	1.02	1.01	0.98	1.00	0.98	1.00	1.01	0.99	0.99	1.00	0.99	1.05
.028	.85	.90	.91	.90	.87	.89	.87	.88	.89	.87	.87	.89	.88	.93
.052	.70	.76	.75	.75	.72	.74	.72	.73	.74	.73	.73	.74	.74	.79
.080	.58	.62	.62	.62	.63	.60	.59	.60	.61	.60	.60	.60	.62	.66
.106	.50	.54	.54	.54	.51	.52	.51	.53	.54	.52	.52	.53	.54	.58
.154	.40	.44	.44	.44	.41	.41	.40	.42	.42	.42	.41	.42	.43	.47
.204	.32	.34	.34	.33	.32	.32	.32	.32	.32	.32	.32	.32	.34	.37
.251	.38	.32	.30	.30	.27	.28	.26	.27	.27	.28	.27	.28	.29	.33
.300	.23	.26	.25	.25	.22	.23	.21	.22	.22	.22	.22	.22	----	----
.352	.19	.22	.20	.20	.16	.18	.16	.16	.17	.16	.16	.16	.17	.21
.401	.14	.17	.14	.15	.12	.12	.11	.11	.11	.11	.11	.10	----	----
.452	.11	.14	.12	.12	.09	.08	.08	.08	.08	.08	.08	.07	.08	.11
.500	.11	.12	.10	.10	.07	.07	.06	.06	.06	.06	.06	.04	----	----
.555	.10	.10	.08	.08	.05	.06	.04	.04	.03	.04	.04	.03	.04	.06
.602	.05	.06	.04	.05	.02	.02	.01	.01	0	-.01	-.01	-.01	----	----
.655	.02	0	-.02	-.02	-.02	-.02	-.02	-.02	-.04	-.04	-.04	-.05	-.04	-.02
.707	.01	-.01	-.02	-.02	-.03	-.03	-.03	-.04	-.05	-.05	-.06	-.06	----	----
.755	.01	.01	-.02	-.02	-.02	-.02	-.02	-.03	-.04	-.04	-.05	-.05	-.05	-.03
.852	-.02	-.01	-.04	-.04	-.05	-.04	-.05	-.06	-.07	-.07	-.08	-.08	-.04	-.02
.904	-.06	-.06	-.09	-.09	-.10	-.10	-.11	-.11	-.13	-.14	-.14	-.15	----	----
.955	-.11	-.11	-.15	-.15	-.16	-.16	-.17	-.18	-.21	-.22	-.22	-.24	-.22	-.20

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(j) $\alpha_o = 12^\circ$

Upper surface													
x/c \ M	0.32	0.42	0.51	0.55	0.57	0.59	0.62	0.65	0.68	0.70	0.73	0.76	0.79
0	-0.73	-0.70	-0.74	-0.70	-0.69	-0.65	-0.65	-0.59	-0.52	-0.48	-0.40	-0.28	-0.23
.006	-.65	-.65	-.76	-.73	-.75	-.73	-.77	-.76	-.76	-.77	-.70	-.64	-.67
.016	-.65	-.65	-.78	-.73	-.75	-.73	-.77	-.76	-.76	-.76	-.70	-.64	-.66
.027	-.65	-.66	-.79	-.74	-.76	-.74	-.78	-.77	-.76	-.77	-.70	-.64	-.66
.051	-.66	-.66	-.74	-.74	-.76	-.75	-.78	-.76	-.77	-.76	-.68	-.64	-.66
.080	-.67	-.65	-.73	-.74	-.76	-.74	-.76	-.76	-.74	-.72	-.67	-.64	-.65
.106	-.65	-.64	-.70	-.70	-.71	-.69	-.72	-.70	-.66	-.65	-.64	-.60	-.62
.154	-.66	-.64	-.71	-.70	-.70	-.69	-.71	-.70	-.66	-.63	-.63	-.61	-.61
.199	-.67	-.66	-.70	-.68	-.69	-.68	-.70	-.68	-.66	-.63	-.63	-.62	-.61
.255	-.69	-.67	-.70	-.68	-.69	-.68	-.69	-.68	-.66	-.64	-.64	-.62	-.62
.304	-.70	-.67	-.70	-.68	-.69	-.69	-.69	-.68	-.66	-.64	-.64	-.63	-.63
.351	-.70	-.68	-.70	-.68	-.70	-.69	-.70	-.68	-.66	-.65	-.66	-.64	-.64
.399	-.70	-.68	-.71	-.68	-.70	-.70	-.70	-.69	-.68	-.66	-.66	-.65	-.65
.448	-.70	-.68	-.71	-.68	-.70	-.70	-.70	-.70	-.68	-.67	-.68	-.66	-.66
.502	-.70	-.68	-.70	-.68	-.70	-.70	-.70	-.69	-.68	-.68	-.69	-.66	-.67
.551	-.68	-.66	-.69	-.67	-.69	-.69	-.68	-.68	-.68	-.68	-.69	-.67	-.68
.600	-.66	-.65	-.68	-.66	-.68	-.68	-.68	-.68	-.68	-.68	-.69	-.68	-.68
.655	-.65	-.64	-.66	-.64	-.67	-.65	-.66	-.68	-.67	-.67	-.69	-.68	-.69
.758	-.60	-.59	-.63	-.60	-.64	-.64	-.64	-.65	-.66	-.66	-.69	-.69	-.70
.804	-.57	-.60	-.61	-.58	-.62	-.62	-.62	-.64	-.64	-.66	-.68	-.68	-.68
.904	-.52	-.51	-.54	-.52	-.55	-.57	-.56	-.58	-.60	-.62	-.64	-.66	-.67
.955	-.46	-.46	-.50	-.48	-.52	-.53	-.53	-.55	-.56	-.58	-.62	-.63	-.65
1.000	-.39	-.39	-.44	-.42	-.46	-.47	-.48	-.50	-.51	-.54	-.56	-.58	-.58

Lower surface													
x/c \ M	0.32	0.42	0.51	0.55	0.57	0.59	0.62	0.65	0.68	0.70	0.73	0.76	0.79
0.015	0.95	0.96	0.98	1.00	0.99	0.99	1.00	1.01	1.01	1.02	1.02	1.02	1.02
.028	.86	.86	.88	.90	.89	.88	.89	.90	.91	.91	.91	.92	.92
.052	.72	.72	.74	.76	.75	.74	.75	.76	.77	.78	.77	.78	.78
.080	.61	.60	.60	.64	.62	.62	.62	.63	.64	.64	.65	.65	.66
.106	.53	.52	.53	.56	.54	.54	.54	.56	.56	.56	.57	.54	.58
.154	.42	.42	.42	.46	.44	.44	.44	.45	.46	.46	.46	.47	.48
.204	.34	.33	.33	.36	.34	.34	.34	.35	.36	.36	.36	.37	.38
.251	.30	.28	.28	.31	.29	.29	.30	.30	.31	.31	.32	.32	.33
.300	.24	.23	.22	.26	.24	.24	.24	.25	.26	.26	.25	.26	----
.352	.19	.18	.17	.20	.18	.18	.18	.19	.19	.19	.19	.20	.20
.401	.14	.13	.12	.15	.13	.13	.13	.13	.14	.14	.13	.14	----
.452	.11	.09	.09	.12	.10	.09	.10	.10	.10	.10	.10	.10	.10
.500	.09	.07	.06	.09	.07	.07	.07	.06	.07	.07	.06	.07	----
.555	.07	.05	.04	.07	.05	.05	.05	.04	.04	.04	.04	.04	.05
.602	.03	.01	0	.02	0	0	0	0	0	0	-.01	0	----
.655	-.02	-.03	-.04	-.03	-.05	-.04	-.04	-.04	-.04	-.05	-.04	-.05	-.04
.707	-.04	-.04	-.06	-.04	-.06	-.06	-.06	-.06	-.06	-.06	-.06	-.07	----
.755	-.04	-.04	-.06	-.05	-.07	-.06	-.06	-.06	-.06	-.07	-.06	-.07	-.06
.852	-.08	-.07	-.09	-.09	-.11	-.11	-.10	-.11	-.11	-.11	-.11	-.12	-.10
.904	-.15	-.14	-.16	-.15	-.17	-.18	-.17	-.18	-.18	-.18	-.18	-.19	----
.955	-.22	-.21	-.24	-.23	-.25	-.26	-.25	-.27	-.27	-.28	-.27	-.28	-.25

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(k) $\alpha_o = 14^\circ$

Upper surface												
x/c \ M	0.32	0.42	0.52	0.54	0.56	0.60	0.62	0.65	0.67	0.70	0.73	0.76
0	-0.74	-0.69	-0.68	-0.68	-0.66	-0.62	-0.63	-0.61	-0.56	-0.43	-0.50	-0.50
.006	-.59	-.54	-.57	-.57	-.58	-.56	-.63	-.60	-.59	-.58	-.61	-.70
.016	-.60	-.54	-.57	-.56	-.58	-.56	-.60	-.60	-.58	-.58	-.61	-.69
.027	-.60	-.54	-.57	-.56	-.58	-.56	-.59	-.60	-.59	-.59	-.61	-.70
.051	-.61	-.54	-.58	-.57	-.58	-.56	-.60	-.61	-.58	-.59	-.61	-.71
.080	-.61	-.55	-.58	-.57	-.58	-.57	-.60	-.62	-.59	-.58	-.60	-.70
.106	-.61	-.55	-.58	-.56	-.58	-.56	-.58	-.60	-.58	-.58	-.60	-.64
.154	-.62	-.55	-.58	-.57	-.59	-.57	-.60	-.62	-.59	-.59	-.61	-.62
.199	-.63	-.56	-.59	-.58	-.60	-.58	-.60	-.61	-.59	-.60	-.61	-.62
.255	-.64	-.58	-.60	-.60	-.60	-.58	-.60	-.61	-.60	-.60	-.62	-.62
.304	-.64	-.59	-.62	-.60	-.61	-.59	-.62	-.62	-.61	-.61	-.63	-.63
.351	-.66	-.60	-.62	-.62	-.62	-.60	-.63	-.62	-.62	-.62	-.64	-.64
.399	-.67	-.60	-.64	-.63	-.64	-.61	-.64	-.64	-.62	-.63	-.65	-.65
.448	-.68	-.62	-.65	-.64	-.64	-.62	-.65	-.65	-.64	-.64	-.66	-.66
.502	-.68	-.63	-.66	-.64	-.65	-.63	-.66	-.66	-.64	-.65	-.66	-.67
.551	-.69	-.63	-.66	-.65	-.65	-.63	-.66	-.66	-.65	-.66	-.67	-.68
.600	-.69	-.62	-.66	-.65	-.66	-.64	-.66	-.67	-.66	-.66	-.67	-.68
.655	-.70	-.62	-.66	-.65	-.66	-.63	-.66	-.67	-.66	-.67	-.67	-.68
.758	-.70	-.63	-.66	-.65	-.66	-.63	-.66	-.67	-.66	-.67	-.68	-.70
.804	-.69	-.62	-.65	-.64	-.65	-.62	-.66	-.66	-.66	-.67	-.68	-.70
.904	-.64	-.58	-.61	-.60	-.62	-.60	-.63	-.64	-.64	-.65	-.66	-.68
.955	-.59	-.55	-.58	-.57	-.59	-.57	-.60	-.62	-.62	-.63	-.65	-.67
1.000	-.46	-.50	-.53	-.52	-.54	-.52	-.57	-.58	-.59	-.60	-.61	-.63
Lower surface												
x/c \ M	0.32	0.42	0.52	0.54	0.56	0.60	0.62	0.65	0.67	0.70	0.73	0.76
0.015	0.94	0.98	1.00	1.00	1.02	1.02	1.02	1.03	1.04	1.05	1.05	1.06
.028	.89	.90	.90	.92	.92	.92	.93	.94	.94	.95	.95	.96
.052	.75	.76	.76	.78	.78	.79	.79	.80	.81	.82	.82	.83
.080	.62	.64	.64	.65	.66	.66	.68	.67	.68	.68	.69	.71
.106	.55	.56	.56	.58	.58	.59	.59	.59	.60	.61	.62	.64
.154	.44	.46	.46	.46	.47	.48	.48	.48	.50	.50	.50	.52
.204	.35	.37	.36	.38	.37	.38	.38	.38	.40	.40	.40	.42
.251	.30	.32	.31	.32	.32	.33	.33	.33	.34	.34	.36	.37
.300	.25	.26	.25	.26	.26	.28	.27	.27	.28	.28	.29	.31
.352	.18	.21	.19	.20	.20	.21	.20	.20	.22	.22	.22	.24
.401	.13	.15	.14	.14	.14	.15	.14	.15	.15	.15	.16	.18
.452	.09	.12	.10	.10	.10	.12	.11	.11	.12	.11	.12	.14
.500	.07	.08	.06	.07	.08	.08	.08	.07	.06	.08	.08	.10
.555	.05	.06	.04	.04	.05	.06	.05	.04	.04	.04	.05	.07
.602	.01	.01	-.01	-.01	-.01	0	-.01	-.01	-.01	-.01	-.01	.01
.655	-.04	-.04	-.06	-.06	-.06	-.05	-.07	-.06	-.06	-.06	-.06	-.04
.707	-.06	-.06	-.09	-.08	-.09	-.07	-.10	-.08	-.09	-.08	-.08	-.07
.755	-.03	-.07	-.10	-.09	-.09	-.08	-.11	-.09	-.10	-.09	-.09	-.07
.852	-.08	-.13	-.15	-.15	-.15	-.13	-.16	-.15	-.15	-.14	-.14	-.12
.904	-.16	-.20	-.23	-.23	-.23	-.21	-.24	-.23	-.24	-.22	-.23	-.20
.955	-.23	-.29	-.33	-.32	-.32	-.30	-.34	-.33	-.34	-.33	-.33	-.32

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(l) $\alpha_o = 16^o$

Upper surface										
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.59	0.62	0.65	0.67	0.70
0	-0.75	-0.66	-0.65	-0.68	-0.68	-0.71	-0.73	-0.72	-0.76	-0.75
.006	-.64	-.50	-.53	-.55	-.54	-.57	-.60	-.60	-.64	-.64
.016	-.64	-.51	-.53	-.55	-.54	-.57	-.60	-.60	-.64	-.64
.027	-.64	-.50	-.54	-.55	-.54	-.57	-.60	-.60	-.64	-.64
.051	-.64	-.50	-.54	-.55	-.55	-.57	-.60	-.60	-.63	-.64
.080	-.65	-.50	-.54	-.55	-.55	-.58	-.60	-.60	-.63	-.64
.106	-.65	-.50	-.54	-.56	-.55	-.58	-.60	-.60	-.64	-.64
.154	-.66	-.51	-.55	-.56	-.56	-.58	-.60	-.60	-.64	-.64
.199	-.66	-.52	-.56	-.56	-.56	-.58	-.61	-.60	-.64	-.65
.255	-.67	-.52	-.56	-.58	-.56	-.60	-.62	-.62	-.64	-.66
.304	-.68	-.53	-.57	-.58	-.57	-.60	-.62	-.62	-.66	-.66
.351	-.68	-.54	-.58	-.59	-.58	-.61	-.62	-.62	-.66	-.66
.399	-.69	-.54	-.58	-.60	-.59	-.62	-.64	-.62	-.66	-.67
.448	-.69	-.55	-.59	-.60	-.59	-.62	-.64	-.64	-.67	-.68
.502	-.71	-.57	-.60	-.61	-.60	-.63	-.65	-.64	-.68	-.68
.551	-.73	-.57	-.60	-.62	-.61	-.63	-.65	-.64	-.68	-.68
.600	-.74	-.56	-.60	-.62	-.61	-.64	-.66	-.65	-.68	-.69
.655	-.74	-.57	-.61	-.62	-.61	-.64	-.66	-.65	-.69	-.69
.758	-.78	-.58	-.62	-.63	-.62	-.65	-.67	-.66	-.70	-.70
.804	-.77	-.58	-.62	-.63	-.62	-.65	-.66	-.66	-.70	-.70
.904	-.72	-.56	-.61	-.62	-.61	-.64	-.66	-.65	-.69	-.69
.955	-.67	-.55	-.60	-.60	-.60	-.62	-.64	-.64	-.68	-.68
1.000	-.53	-.40	-.50	-.52	-.53	-.57	-.60	-.61	-.66	-.65
Lower surface										
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.59	0.62	0.65	0.67	0.70
0.015	0.96	1.01	1.03	1.03	1.04	1.04	1.06	1.06	1.07	1.08
.028	.94	.94	.94	.95	.96	.96	.97	.98	.98	1.00
.052	.81	.81	.82	.81	.82	.83	.84	.85	.86	.86
.080	.69	.69	.69	.68	.70	.70	.72	.72	.72	.74
.106	.60	.62	.62	.61	.62	.63	.64	.65	.65	.66
.154	.50	.51	.51	.50	.51	.52	.53	.54	.54	.55
.204	.40	.42	.41	.40	.41	.41	.41	.44	.43	.45
.251	.34	.37	.36	.35	.36	.36	.37	.38	.38	.39
.300	.29	.31	.29	.28	.29	.29	.30	.31	.31	.32
.352	.23	.25	.23	.22	.23	.22	.24	.24	.22	.26
.401	.17	.19	.17	.16	.16	.16	.18	.18	.18	.19
.452	.13	.16	.12	.12	.12	.12	.13	.14	.13	.14
.500	.10	.12	.09	.08	.09	.08	.09	.10	.10	.10
.555	.07	.10	.06	.05	.06	.06	.06	.07	.06	.08
.602	-.04	.04	0	-.01	0	-.01	0	0	0	.01
.655	-.04	-.05	-.06	-.07	-.06	-.06	-.05	-.05	-.06	-.05
.707	-.06	-.08	-.08	-.10	-.09	-.09	-.08	-.08	-.09	-.07
.755	-.08	-.09	-.10	-.11	-.10	-.10	-.10	-.10	-.10	-.09
.852	-.14	-.15	-.16	-.17	-.16	-.17	-.16	-.16	-.17	-.15
.904	-.23	-.24	-.25	-.26	-.25	-.26	-.25	-.25	-.26	-.24
.955	-.26	-.32	-.34	-.35	-.34	-.36	-.36	-.36	-.37	-.35

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(m) $\alpha_o = 18^\circ$

Upper surface

x/c \ M	0.31	0.41	0.52	0.54	0.57	0.60	0.63	0.65	0.68
0	-0.60	-0.63	-0.65	-0.67	-0.69	-0.73	-0.76	-0.78	-0.74
.006	-.54	-.56	-.60	-.62	-.60	-.60	-.65	-.68	-.68
.016	-.54	-.56	-.60	-.62	-.60	-.60	-.66	-.68	-.68
.027	-.54	-.56	-.60	-.62	-.60	-.60	-.65	-.68	-.68
.051	-.54	-.56	-.60	-.62	-.60	-.60	-.65	-.68	-.68
.080	-.53	-.56	-.60	-.62	-.60	-.60	-.65	-.68	-.68
.106	-.54	-.56	-.60	-.62	-.60	-.60	-.65	-.68	-.68
.154	-.54	-.56	-.60	-.62	-.60	-.60	-.65	-.69	-.68
.199	-.54	-.56	-.61	-.64	-.60	-.60	-.65	-.69	-.68
.255	-.55	-.57	-.62	-.64	-.61	-.61	-.66	-.70	-.68
.304	-.55	-.58	-.62	-.64	-.62	-.62	-.66	-.70	-.68
.351	-.57	-.58	-.62	-.64	-.62	-.62	-.66	-.70	-.69
.399	-.58	-.59	-.63	-.65	-.63	-.62	-.67	-.70	-.70
.448	-.58	-.60	-.64	-.66	-.64	-.63	-.68	-.70	-.70
.502	-.60	-.60	-.64	-.66	-.64	-.64	-.68	-.72	-.70
.551	-.60	-.60	-.65	-.66	-.64	-.64	-.68	-.72	-.71
.600	-.60	-.61	-.65	-.67	-.65	-.64	-.69	-.72	-.72
.655	-.60	-.62	-.66	-.68	-.66	-.64	-.69	-.72	-.72
.758	-.61	-.64	-.66	-.69	-.66	-.66	-.71	-.74	-.72
.804	-.60	-.62	-.66	-.68	-.66	-.66	-.70	-.74	-.72
.904	-.60	-.61	-.66	-.67	-.66	-.64	-.70	-.73	-.72
.955	-.59	-.60	-.64	-.66	-.64	-.64	-.68	-.72	-.71
1.000	-.54	-.58	-.62	-.64	-.63	-.62	-.68	-.71	-.71

Lower surface

x/c \ M	0.31	0.41	0.52	0.54	0.57	0.60	0.63	0.65	0.68
0.015	1.01	1.03	1.04	1.04	1.06	1.06	1.07	1.08	1.08
.028	.95	.98	.98	.98	1.00	1.01	1.02	1.02	1.02
.052	.83	.84	.86	.86	.88	.89	.90	.91	.90
.080	.71	.73	.74	.75	.77	.78	.78	.80	.80
.106	.63	.64	.66	.67	.69	.70	.71	.72	.71
.154	.52	.53	.55	.57	.58	.58	.60	.61	.60
.204	.43	.44	.46	.46	.48	.49	.50	.51	.51
.251	.36	.37	.40	.41	.42	.42	.44	.44	.44
.300	.31	.32	.34	.35	.36	.37	.39	.39	.40
.352	.24	.24	.26	.28	.28	.29	.30	.30	.31
.401	.19	.18	.20	.22	.22	.22	.23	.24	.24
.452	.13	.14	.15	.16	.18	.18	.18	.19	.20
.500	.14	.10	.12	.12	.13	.14	.14	.14	.15
.555	.08	.06	.08	.09	.10	.10	.10	.11	.12
.602	.02	.01	.02	.03	.03	.04	.04	.04	.05
.655	-.04	-.05	-.05	-.03	-.04	-.03	-.01	-.02	0
.707	-.06	-.08	-.08	-.06	-.07	-.06	-.05	-.05	-.04
.755	-.08	-.10	-.10	-.08	-.09	-.08	-.07	-.07	-.06
.852	-.15	-.17	-.17	-.15	-.17	-.15	-.14	-.15	-.13
.904	-.23	-.26	-.16	-.25	-.26	-.25	-.24	-.25	-.23
.955	-.32	-.35	-.37	-.36	-.37	-.36	-.34	-.37	-.35

(n) $\alpha_o = 20^\circ$

Upper surface

x/c \ M	0.31	0.42	0.52	0.55	0.57	0.60	0.62	0.66
0	-0.59	-0.61	-0.64	-0.64	-0.72	-0.69	-0.69	-0.73
.006	-.58	-.60	-.62	-.63	-.70	-.68	-.68	-.72
.016	-.58	-.60	-.62	-.63	-.71	-.68	-.68	-.72
.027	-.58	-.60	-.62	-.62	-.71	-.68	-.68	-.72
.051	-.58	-.60	-.62	-.64	-.71	-.68	-.68	-.72
.080	-.58	-.60	-.62	-.64	-.71	-.68	-.68	-.72
.106	-.58	-.60	-.62	-.63	-.71	-.68	-.68	-.72
.154	-.58	-.60	-.62	-.64	-.72	-.68	-.68	-.72
.199	-.59	-.60	-.62	-.64	-.72	-.68	-.68	-.72
.255	-.59	-.60	-.62	-.64	-.72	-.68	-.68	-.72
.304	-.60	-.60	-.64	-.65	-.72	-.69	-.69	-.72
.351	-.60	-.61	-.64	-.66	-.73	-.70	-.69	-.72
.399	-.61	-.62	-.64	-.66	-.74	-.70	-.70	-.72
.448	-.61	-.62	-.66	-.67	-.74	-.70	-.70	-.73
.502	-.62	-.63	-.66	-.68	-.75	-.71	-.70	-.74
.551	-.62	-.63	-.67	-.68	-.76	-.71	-.71	-.74
.600	-.62	-.64	-.66	-.68	-.76	-.72	-.72	-.74
.655	-.63	-.64	-.66	-.68	-.76	-.72	-.72	-.75
.758	-.64	-.66	-.68	-.70	-.78	-.74	-.72	-.76
.804	-.63	-.65	-.68	-.69	-.78	-.73	-.72	-.76
.904	-.62	-.64	-.67	-.68	-.76	-.72	-.72	-.75
.955	-.61	-.62	-.66	-.67	-.75	-.71	-.70	-.74
1.000	-.60	-.61	-.64	-.66	-.73	-.70	-.70	-.73

Lower surface

x/c \ M	0.31	0.42	0.52	0.55	0.57	0.60	0.62	0.66
0.015	1.01	1.06	1.06	1.06	1.07	1.08	1.08	1.09
.028	.97	1.03	1.02	1.02	1.04	1.04	1.04	1.06
.052	.87	.91	.91	.94	.93	.94	.94	.96
.080	.75	.80	.80	.80	.82	.83	.84	.84
.106	.67	.72	.72	.73	.75	.76	.76	.77
.154	.56	.62	.62	.62	.64	.65	.64	.66
.204	.47	.52	.52	.52	.54	.55	.54	.57
.251	.41	.45	.44	.46	.48	.48	.48	.50
.300	.35	.39	.38	.40	.41	.42	.42	.44
.352	.29	.32	.30	.32	.33	.34	.34	.36
.401	.22	.26	.24	.24	.26	.27	.27	.30
.452	.17	.20	.18	.20	.21	.22	.22	.24
.500	.12	.16	.14	.14	.17	.17	.17	.20
.555	.09	.12	.10	.12	.13	.13	.14	.16
.602	.03	.06	.04	.05	.06	.06	.06	.09
.655	-.02	-.03	-.02	-.01	0	0	0	.03
.707	-.06	-.06	-.06	-.05	-.04	-.04	-.04	-.01
.755	-.08	-.09	-.08	-.07	-.06	-.06	-.06	-.04
.852	-.16	-.16	-.16	-.15	-.15	-.14	-.14	-.12
.904	-.25	-.26	-.26	-.25	-.26	-.25	-.25	-.23
.955	-.35	-.37	-.37	-.37	-.39	-.37	-.37	-.36

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Continued

(o) $\alpha_o = 22^\circ$

Upper surface						
x/c \ M	0.31	0.41	0.52	0.55	0.57	0.60
0	-0.59	-0.76	-0.69	-0.68	-0.70	-0.79
.006	-.58	-.75	-.67	-.68	-.69	-.78
.016	-.58	-.75	-.67	-.67	-.69	-.78
.027	-.58	-.75	-.67	-.67	-.68	-.78
.051	-.58	-.75	-.68	-.68	-.68	-.78
.080	-.58	-.75	-.67	-.68	-.68	-.78
.106	-.58	-.75	-.67	-.68	-.68	-.78
.154	-.58	-.75	-.68	-.69	-.70	-.78
.199	-.58	-.75	-.68	-.68	-.70	-.78
.255	-.59	-.76	-.69	-.68	-.70	-.78
.304	-.59	-.76	-.69	-.68	-.70	-.78
.351	-.60	-.76	-.69	-.69	-.71	-.79
.399	-.60	-.77	-.70	-.69	-.71	-.80
.448	-.61	-.78	-.70	-.70	-.72	-.80
.502	-.62	-.79	-.71	-.70	-.72	-.81
.551	-.62	-.79	-.72	-.71	-.73	-.81
.600	-.63	-.80	-.72	-.71	-.74	-.82
.655	-.63	-.80	-.72	-.72	-.74	-.82
.758	-.63	-.82	-.73	-.72	-.74	-.84
.804	-.63	-.80	-.72	-.72	-.74	-.84
.904	-.62	-.78	-.72	-.71	-.73	-.82
.955	-.61	-.77	-.71	-.70	-.72	-.81
1.000	-.59	-.76	-.70	-.68	-.71	-.80
Lower surface						
x/c \ M	0.31	0.41	0.52	0.55	0.57	0.60
0.015	1.02	1.03	1.04	1.06	1.07	1.08
.028	1.02	1.03	1.04	1.04	1.06	1.06
.052	.92	.94	.94	.95	.96	.98
.080	.81	.84	.84	.85	.86	.89
.106	.73	.76	.77	.79	.80	.82
.154	.62	.66	.66	.66	.68	.72
.204	.53	.56	.56	.57	.59	.62
.251	.46	.50	.49	.50	.52	.54
.300	.40	.43	.43	.44	.46	.48
.352	.34	.36	.35	.36	.38	.40
.401	.26	.29	.28	.29	.30	.34
.452	.21	.24	.22	.24	.25	.28
.500	.17	.19	.18	.19	.20	.23
.555	.13	.15	.14	.15	.16	.19
.602	.08	.08	.06	.08	.08	.12
.655	0	0	0	.02	.02	.04
.707	-.03	-.04	-.04	-.02	-.02	0
.755	-.04	-.07	-.06	-.05	-.05	-.03
.852	-.14	-.17	-.15	-.14	-.14	-.15
.904	-.22	-.28	-.27	-.25	-.25	-.25
.955	-.34	-.42	-.39	-.37	-.38	-.39

(p) $\alpha_o = 24^\circ$

Upper surface						
x/c \ M	0.31	0.42	0.52	0.55	0.58	0.60
0	-0.70	-0.68	-0.78	-0.76	-0.78	-0.77
.006	-.68	-.67	-.77	-.76	-.77	-.76
.016	-.68	-.67	-.77	-.76	-.78	-.76
.027	-.68	-.68	-.77	-.76	-.78	-.76
.051	-.69	-.67	-.78	-.76	-.78	-.76
.080	-.68	-.68	-.77	-.76	-.77	-.76
.106	-.68	-.68	-.77	-.76	-.78	-.76
.154	-.69	-.68	-.78	-.76	-.78	-.76
.199	-.69	-.69	-.78	-.76	-.78	-.76
.255	-.70	-.69	-.78	-.77	-.78	-.76
.304	-.70	-.71	-.78	-.77	-.78	-.77
.351	-.71	-.71	-.79	-.78	-.79	-.76
.399	-.72	-.72	-.80	-.78	-.80	-.78
.448	-.72	-.72	-.80	-.78	-.80	-.78
.502	-.73	-.73	-.80	-.79	-.80	-.78
.551	-.73	-.74	-.81	-.80	-.80	-.79
.600	-.73	-.74	-.82	-.80	-.81	-.79
.655	-.73	-.75	-.82	-.80	-.81	-.79
.758	-.74	-.76	-.83	-.81	-.82	-.80
.804	-.73	-.76	-.82	-.80	-.82	-.80
.904	-.72	-.75	-.80	-.79	-.80	-.79
.955	-.71	-.74	-.80	-.78	-.79	-.78
1.000	-.70	-.73	-.78	-.77	-.78	-.77
Lower surface						
x/c \ M	0.31	0.42	0.52	0.55	0.58	0.60
0.015	0.98	1.01	1.05	1.06	1.06	1.07
.028	1.02	1.03	1.04	1.06	1.06	1.07
.052	.95	.96	1.00	1.00	1.01	1.00
.080	.85	.86	.90	.90	.92	.92
.106	.78	.80	.84	.84	.85	.85
.154	.67	.70	.73	.73	.74	.74
.204	.57	.60	.64	.64	.65	.64
.251	.51	.53	.56	.56	.58	.58
.300	.43	.45	.50	.50	.52	.52
.352	.36	.38	.41	.42	.44	.43
.401	.29	.30	.34	.35	.36	.36
.452	.23	.25	.28	.29	.31	.30
.500	.18	.20	.24	.24	.26	.26
.555	.15	.16	.19	.20	.22	.21
.602	.07	.08	.12	.12	.14	.14
.655	.02	.04	.05	.06	.07	.07
.707	-.03	0	0	.01	.04	.02
.755	-.05	-.02	-.03	-.03	-.01	-.01
.852	-.14	-.11	-.13	-.14	-.11	-.11
.904	-.25	-.23	-.26	-.25	-.23	-.23
.955	-.37	-.35	-.40	-.39	-.37	-.37

NACA

TABLE VII.- PRESSURE COEFFICIENTS FOR THE NACA 64A006 AIRFOIL SECTION - Concluded

(q) $\alpha_o = 26^\circ$

Upper surface				
x/c \ M	0.32	0.42	0.53	0.55
0	-0.77	-0.75	0.85	0.86
.006	-.75	-.74	.84	.84
.016	-.76	-.74	.84	.84
.027	-.75	-.74	.84	.84
.051	-.75	-.74	.84	.84
.080	-.74	-.74	.84	.84
.106	-.76	-.74	.84	.84
.154	-.75	-.74	.84	.84
.199	-.75	-.75	.85	.85
.255	-.77	-.76	.86	.86
.304	-.77	-.76	.86	.86
.351	-.77	-.76	.86	.86
.399	-.78	-.76	.87	.87
.448	-.78	-.78	.88	.88
.502	-.79	-.78	.88	.88
.551	-.79	-.78	.88	.88
.600	-.79	-.78	.89	.88
.655	-.79	-.78	.90	.88
.758	-.81	-.78	.90	.89
.804	-.80	-.78	.90	.89
.904	-.79	-.77	.88	.87
.955	-.77	-.76	.87	.86
1.000	-.77	-.75	.86	.86
Lower surface				
x/c \ M	0.32	0.42	0.53	0.55
0.015	0.96	1.00	1.03	1.04
.028	1.01	1.03	1.05	1.06
.052	.97	1.00	1.02	1.02
.080	.91	.92	.94	.95
.106	.84	.86	.88	.88
.154	.73	.75	.78	.78
.204	.64	.66	.68	.69
.251	.56	.60	.61	.62
.300	.51	.52	.54	.56
.352	.42	.45	.46	.48
.401	.36	.38	.40	.40
.452	.30	.32	.34	.34
.500	.25	.28	.28	.30
.555	.20	.22	.24	.24
.602	.13	.15	.16	.16
.655	.06	.07	.09	.10
.707	.02	.02	.04	.04
.755	-.02	-.01	.01	0
.852	-.12	-.12	-.11	-.11
.904	-.25	-.25	-.24	-.24
.955	-.38	-.39	-.40	-.40

(r) $\alpha_o = 28^\circ$

Upper surface			
x/c \ M	0.32	0.42	0.53
0	-0.85	-0.88	-0.90
.006	-.85	-.88	-.90
.016	-.85	-.88	-.90
.027	-.84	-.87	-.90
.051	-.85	-.88	-.90
.080	-.85	-.88	-.90
.106	-.85	-.88	-.90
.154	-.86	-.88	-.91
.199	-.86	-.88	-.91
.255	-.87	-.89	-.92
.304	-.87	-.90	-.92
.351	-.88	-.90	-.92
.399	-.88	-.90	-.94
.448	-.89	-.91	-.94
.502	-.89	-.91	-.94
.551	-.90	-.91	-.94
.600	-.90	-.92	-.95
.655	-.90	-.92	-.95
.758	-.89	-.92	-.95
.804	-.89	-.91	-.95
.904	-.87	-.90	-.94
.955	-.86	-.88	-.92
1.000	-.85	-.88	-.91
Lower surface			
x/c \ M	0.32	0.42	0.53
0.015	0.97	0.97	1.00
.028	1.03	1.02	1.05
.052	1.03	1.01	1.04
.080	.96	.94	.97
.106	.89	.88	.92
.154	.80	.78	.82
.204	.71	.69	.73
.251	.64	.63	.66
.300	.56	.56	.59
.352	.50	.48	.52
.401	.41	.40	.44
.452	.36	.34	.39
.500	.30	.29	.32
.555	.26	.24	.28
.602	.18	.16	.15
.655	.10	.10	.13
.707	.04	.04	.07
.755	0	0	.03
.852	-.11	-.12	-.09
.904	-.25	-.26	-.23
.955	-.41	-.42	-.41

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION

(a) $\alpha_0 = -5^{\circ}$

Upper surface															
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.85	0.88
0	-0.32	-0.27	-0.18	-0.11	-0.06	0.02	0.08	0.13	0.21	0.26	0.34	0.39	0.42	0.51	0.61
.006	.96	1.00	1.03	1.07	1.04	1.04	1.04	1.06	1.07	1.07	1.07	1.08	1.10	1.09	1.19
.013	.78	.80	.81	.85	.82	.82	.82	.82	.83	.84	.84	.83	.87	.86	.86
.025	.57	.58	.60	.62	.60	.60	.50	.61	.61	.64	.62	.62	.66	.66	.66
.051	.39	.41	.44	.45	.42	.43	.44	.44	.45	.46	.46	.45	.50	.50	.51
.075	.28	.29	.31	.33	.29	.30	.31	.31	.32	.34	.32	.32	.37	.37	.37
.101	.19	.20	.22	.22	.19	.20	.21	.21	.22	.23	.22	.21	.26	.27	.28
.150	.09	.11	.12	.13	.09	.20	.10	.11	.12	.12	.11	.10	.15	.15	.16
.200	.03	.03	.04	.04	0	.01	.02	.02	.03	.03	.02	0	.05	.06	.06
.251	-.05	-.04	-.04	-.04	-.09	-.07	-.06	-.07	-.06	-.07	-.08	-.10	-.06	-.06	-.05
.298	-.09	-.08	-.08	-.09	-.13	-.12	-.12	-.13	-.12	-.13	-.14	-.16	-.12	-.12	-.12
.352	-.12	-.12	-.12	-.13	-.18	-.17	-.17	-.17	-.17	-.18	-.21	-.22	-.19	-.20	-.20
.400	-.15	-.15	-.14	-.17	-.21	-.20	-.21	-.21	-.21	-.22	-.25	-.28	-.24	-.26	-.26
.450	-.16	-.17	-.16	-.18	-.24	-.22	-.23	-.24	-.24	-.26	-.28	-.32	-.29	-.31	-.31
.500	-.19	-.19	-.20	-.21	-.26	-.25	-.26	-.26	-.25	-.28	-.32	-.36	-.33	-.37	-.39
.551	-.19	-.18	-.19	-.22	-.26	-.25	-.26	-.27	-.28	-.28	-.32	-.37	-.35	-.40	-.44
.600	-.18	-.18	-.20	-.22	-.26	-.24	-.26	-.26	-.27	-.28	-.32	-.40	-.37	-.44	-.50
.651	-.17	-.18	-.19	-.20	-.26	-.24	-.25	-.26	-.26	-.28	-.32	-.36	-.34	-.40	-.52
.701	-.17	-.14	-.18	-.20	-.26	-.24	-.24	-.26	-.26	-.28	-.32	-.38	-.35	-.40	-.56
.752	-.17	-.12	-.18	-.19	-.25	-.23	-.24	-.25	-.25	-.28	-.30	-.36	-.33	-.39	-.56
.802	-.15	-.14	-.16	-.17	-.23	-.20	-.22	-.21	-.23	-.24	-.27	-.34	-.30	-.34	-.54
.852	-.12	-.11	-.12	-.14	-.19	-.17	-.18	-.19	-.19	-.21	-.24	-.32	-.16	-.19	-.46
.902	-.07	-.07	-.08	-.09	-.13	-.11	-.11	-.11	-.12	-.14	-.17	-.20	-.04	-.05	-.28
.947	.01	.04	.06	-.03	-.02	.01	.01	.01	.01	.01	0	-.05	.01	.01	-.11
1.000	.05	.06	.06	.05	0	.02	.02	.03	.02	.02	.01	.01	.08	.07	-.01
Lower surface															
x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.74	0.76	0.79	0.81	0.85	0.88
0.013	-0.85	-0.83	-0.80	-0.80	-0.83	-0.80	-0.81	-0.81	-0.89	-0.91	-0.96	-1.14	-1.67	-1.60	-1.47
.026	-.86	-.83	-.80	-.81	-.83	-.80	-.81	-.81	-.89	-.91	-.96	-1.13	-1.61	-1.51	-1.37
.050	-.88	-.85	-.81	-.82	-.84	-.81	-.82	-.83	-.91	-.93	-.97	-1.11	-1.48	-1.38	-1.25
.074	-.88	-.86	-.83	-.83	-.85	-.83	-.84	-.84	-.91	-.94	-.96	-1.07	-1.40	-1.29	-1.17
.101	-.89	-.86	-.86	-.84	-.86	-.83	-.84	-.85	-.88	-.92	-.94	----	----	----	----
.151	-.84	-.83	-.84	-.85	-.86	-.83	-.83	-.83	-.85	-.88	-.88	-.91	-1.26	-1.18	-1.06
.200	-.73	-.74	-.77	-.80	-.81	-.79	-.78	-.79	-.79	-.80	-.80	----	----	----	----
.252	-.55	-.58	-.62	-.68	-.72	-.71	-.69	-.71	-.70	-.70	-.72	-.71	-1.14	-1.11	-1.01
.302	-.38	-.43	-.47	-.55	-.62	-.61	-.60	-.61	-.60	-.60	-.62	----	----	----	----
.352	-.25	-.30	-.35	-.42	-.50	-.60	-.50	-.51	-.51	-.49	-.54	-.54	-.72	-.96	-.99
.400	-.16	-.20	-.25	-.30	-.39	-.40	-.41	-.42	-.42	-.40	-.46	----	----	----	----
.451	-.10	-.12	-.17	-.21	-.29	-.30	-.32	-.32	-.32	-.32	-.38	-.40	-.34	-.54	-.85
.501	-.05	-.07	-.11	-.14	-.22	-.22	-.24	-.25	-.27	-.25	-.31	----	----	----	----
.551	-.05	-.06	-.09	-.12	-.14	-.17	-.18	-.19	-.22	-.19	-.28	-.26	-.14	-.39	-.56
.601	-.03	-.02	-.05	-.07	-.10	-.13	-.13	-.14	-.15	-.14	-.21	----	----	----	----
.652	0	0	-.02	-.04	-.06	-.07	-.08	-.09	-.10	-.10	-.16	-.16	-.01	-.26	-.40
.702	.02	.03	.01	-.01	-.02	-.03	-.04	-.05	-.06	-.06	-.11	----	----	----	----
.752	.04	.05	.04	.02	.02	.01	-.01	-.01	-.02	-.02	-.07	-.08	.07	-.11	-.29
.801	.06	.07	.06	.04	.04	.04	.02	.02	.01	.01	-.04	----	----	----	----
.851	.06	.08	.07	.06	.05	.05	.04	.04	.04	.02	0	-.02	.11	.02	-.15
.902	.08	.09	.08	.07	.07	.07	.06	.06	.06	.05	.01	----	----	----	----
.951	.06	.07	.07	.06	.05	.06	.05	.05	.05	.05	.03	.02	.08	.08	-.03

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(b) $\alpha_o = -4^o$

Upper surface																
x/c \ M	0.31	0.40	0.51	0.55	0.61	0.63	0.66	0.68	0.71	0.73	0.76	0.79	0.81	0.85	0.87	0.90
0	-0.16	-0.11	0.04	0.10	0.19	0.23	0.29	0.31	0.35	0.40	0.48	0.53	0.56	0.62	0.68	0.75
.006	.96	.95	.98	.97	.98	.99	.99	1.00	1.00	1.01	1.02	1.02	1.04	1.05	1.05	1.05
.013	.70	.70	.72	.72	.72	.73	.73	.74	.75	.75	.76	.77	.79	.80	.79	.80
.025	.49	.47	.50	.49	.50	.51	.52	.52	.53	.54	.54	.56	.57	.59	.59	.60
.051	.33	.31	.34	.33	.36	.34	.36	.36	.37	.37	.39	.40	.42	.43	.44	.46
.075	.21	.19	.22	.20	.29	.22	.23	.23	.24	.24	.26	.27	.28	.30	.31	.33
.101	.13	.10	.13	.11	.18	.12	.14	.13	.14	.14	.16	.16	.18	.20	.21	.23
.150	.05	.02	.04	.02	.08	.03	.04	.03	.04	.04	.05	.05	.06	.09	.10	.12
.200	-.02	-.05	-.03	-.06	-.05	-.05	-.05	-.05	-.05	-.04	-.04	-.04	-.02	-.01	.01	.03
.251	-.09	-.12	-.10	-.13	-.12	-.13	-.13	-.14	-.14	-.14	-.14	-.14	-.13	-.12	-.10	-.08
.298	-.12	-.15	-.14	-.17	-.17	-.17	-.17	-.18	-.19	-.19	-.20	-.20	-.19	-.18	-.16	-.15
.352	-.15	-.18	-.18	-.21	-.21	-.21	-.22	-.23	-.24	-.24	-.25	-.26	-.26	-.25	-.24	-.22
.400	-.17	-.20	-.20	-.23	-.24	-.25	-.25	-.26	-.26	-.28	-.29	-.30	-.31	-.31	-.30	-.28
.450	-.18	-.21	-.21	-.24	-.25	-.26	-.26	-.28	-.28	-.30	-.31	-.34	-.34	-.34	-.33	-.31
.500	-.19	-.24	-.23	-.27	-.27	-.28	-.29	-.31	-.32	-.33	-.35	-.38	-.40	-.42	-.42	-.39
.551	-.20	-.23	-.23	-.27	-.27	-.28	-.29	-.31	-.32	-.33	-.35	-.38	-.41	-.45	-.48	-.45
.600	-.20	-.24	-.24	-.29	-.29	-.30	-.30	-.32	-.34	-.35	-.36	-.40	-.42	-.48	-.55	-.52
.651	-.18	-.22	-.22	-.26	-.27	-.27	-.28	-.30	-.31	-.32	-.34	-.36	-.38	-.43	-.55	-.54
.701	-.18	-.22	-.22	-.26	-.27	-.27	-.28	-.30	-.31	-.32	-.34	-.36	-.37	-.41	-.56	-.58
.752	-.17	-.21	-.21	-.25	-.25	-.26	-.27	-.28	-.30	-.30	-.31	-.34	-.35	-.38	-.51	-.60
.802	-.15	-.18	-.18	-.22	-.23	-.24	-.24	-.26	-.27	-.28	-.29	-.31	-.32	-.34	-.48	-.56
.852	-.10	-.11	-.10	-.12	-.13	-.14	-.14	-.15	-.16	-.17	-.17	-.18	-.17	-.15	-.23	-.48
.902	-.02	-.03	-.02	-.05	-.04	-.05	-.04	-.05	-.06	-.06	-.05	-.05	-.04	-.02	-.03	-.30
.947	.03	0	.02	-.01	-.01	0	0	-.01	-.01	-.01	-.01	0	.02	.04	.03	-.14
1.000	.09	.07	.08	.06	.06	.06	.07	.07	.06	.06	.08	.08	.11	.12	.12	-.01
Lower surface																
x/c \ M	0.31	0.40	0.51	0.55	0.61	0.63	0.66	0.68	0.71	0.73	0.76	0.79	0.81	0.85	0.87	0.90
0.013	-0.92	-0.94	-0.86	-0.89	-0.85	-0.87	-0.86	-0.88	-0.92	-1.00	-1.00	-1.20	-1.70	-1.59	-1.45	-1.34
.026	-.94	-.95	-.86	-.90	-.85	-.87	-.86	-.87	-.91	-.99	-.99	-1.18	-1.59	-1.47	-1.35	-1.23
.050	-.95	-.96	-.88	-.90	-.87	-.89	-.86	-.89	-.92	-.98	-.97	-1.14	-1.44	-1.34	-1.22	-1.11
.074	-.91	-.94	-.88	-.90	-.87	-.89	-.87	-.89	-.92	-.97	-.95	-1.08	-1.36	-1.26	-1.15	-1.04
.101	-.84	-.88	-.86	-.89	-.86	-.88	-.86	-.88	-.91	-.93	-.91	-.99	-1.29	-1.20	-----	-----
.151	-.56	-.67	-.73	-.78	-.78	-.81	-.80	-.83	-.84	-.83	-.82	-.87	-1.22	-1.14	-1.04	-.93
.200	-.31	-.43	-.53	-.61	-.65	-.67	-.69	-.72	-.72	-.70	-.71	-.69	-1.18	-1.10	-----	-----
.252	-.16	-.24	-.34	-.42	-.48	-.51	-.54	-.57	-.56	-.55	-.58	-.58	-1.03	-1.08	-.99	-.89
.302	-.11	-.15	-.21	-.28	-.34	-.36	-.41	-.44	-.42	-.43	-.47	-.46	-.52	-1.01	-----	-----
.352	-.09	-.11	-.13	-.19	-.23	-.25	-.29	-.31	-.30	-.32	-.35	-.33	-.28	-.72	-.96	-.88
.400	-.05	-.09	-.09	-.13	-.15	-.17	-.20	-.23	-.22	-.24	-.27	-.27	-.13	-.42	-----	-----
.451	-.03	-.05	-.05	-.08	-.09	-.11	-.13	-.15	-.15	-.16	-.19	-.19	-.05	-.26	-.68	-.88
.501	-.01	-.04	-.02	-.05	-.05	-.06	-.08	-.10	-.09	-.11	-.13	-.13	0	-.14	-----	-----
.551	-.01	-.04	-.02	-.03	-.03	-.03	-.05	-.06	-.06	-.07	-.09	-.09	.03	-.07	-.32	-.80
.601	.01	-.01	.01	0	0	-.01	-.02	-.02	-.02	-.03	-.06	-.05	.06	0	-----	-----
.652	.04	.02	.04	.02	.03	.02	.02	.01	.01	0	-.01	-.01	.08	.06	-.16	-.59
.702	.06	.04	.06	.05	.06	.04	.04	.04	.04	.03	.02	.03	.11	.10	-----	-----
.752	.09	.06	.08	.07	.08	.07	.07	.06	.06	.06	.05	.06	.14	.13	.02	-.34
.801	.11	.08	.10	.09	.10	.09	.09	.09	.09	.08	.08	.09	.16	.15	-----	-----
.851	.11	.09	.12	.10	.10	.09	.09	.09	.10	.09	.09	.10	.16	.15	.12	-.17
.902	.11	.09	.13	.10	.11	.10	.10	.10	.10	.10	.10	.11	.15	.15	-----	-----
.951	.10	.07	.11	.07	.08	.07	.08	.08	.08	.08	.08	.09	.11	.11	.12	-.04

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(c) $\alpha_o = -3^o$

Upper surface																
x/c \ M	0.30	0.41	0.50	0.55	0.61	0.63	0.65	0.68	0.71	0.73	0.75	0.78	0.81	0.84	0.87	0.90
0	0.07	0.16	0.28	0.35	0.42	0.46	0.49	0.54	0.56	0.59	0.64	0.67	0.72	0.77	0.80	0.84
.006	.85	.87	.88	.90	.90	.90	.90	.92	.92	.93	.94	.94	.95	.96	.97	1.00
.013	.57	.57	.58	.59	.60	.61	.60	.62	.63	.64	.64	.66	.66	.68	.70	.74
.025	.35	.34	.35	.36	.38	.38	.38	.40	.41	.41	.42	.43	.44	.46	.49	.53
.051	.20	.20	.21	.22	.24	.24	.24	.26	.27	.26	.28	.29	.31	.32	.35	.40
.075	.09	.09	.09	.10	.11	.11	.12	.13	.14	.14	.15	.16	.17	.20	.22	.27
.101	.02	.02	.01	.01	.02	.02	.02	.04	.05	.04	.05	.05	.07	.09	.14	.17
.150	-.05	-.07	-.07	-.07	-.06	-.06	-.06	-.05	-.04	-.06	-.05	-.05	-.03	-.02	.01	.07
.200	-.12	-.12	-.13	-.13	-.12	-.13	-.13	-.12	-.12	-.14	-.13	-.13	-.12	-.11	-.07	-.02
.251	-.16	-.19	-.19	-.20	-.20	-.21	-.21	-.21	-.20	-.22	-.22	-.24	-.22	-.22	-.19	-.13
.298	-.20	-.22	-.23	-.24	-.23	-.25	-.25	-.25	-.25	-.28	-.27	-.29	-.28	-.29	-.26	-.20
.352	-.22	-.24	-.26	-.27	-.26	-.28	-.29	-.29	-.29	-.32	-.33	-.35	-.35	-.36	-.32	-.26
.400	-.24	-.27	-.28	-.29	-.29	-.31	-.31	-.31	-.31	-.35	-.36	-.39	-.40	-.41	-.38	-.32
.450	-.24	-.27	-.28	-.30	-.30	-.32	-.32	-.33	-.33	-.37	-.38	-.42	-.43	-.44	-.42	-.35
.500	-.26	-.28	-.30	-.32	-.32	-.34	-.35	-.35	-.36	-.39	-.41	-.46	-.49	-.52	-.50	-.44
.551	-.25	-.28	-.30	-.32	-.31	-.33	-.34	-.34	-.35	-.39	-.40	-.45	-.50	-.57	-.55	-.49
.600	-.25	-.28	-.30	-.32	-.32	-.34	-.34	-.35	-.35	-.39	-.40	-.45	-.49	-.61	-.62	-.55
.651	-.25	-.26	-.28	-.30	-.29	-.31	-.32	-.32	-.32	-.36	-.38	-.41	-.44	-.57	-.63	-.58
.701	-.24	-.26	-.28	-.30	-.29	-.31	-.31	-.32	-.32	-.35	-.36	-.39	-.41	-.52	-.62	-.59
.752	-.21	-.24	-.25	-.27	-.26	-.28	-.29	-.30	-.29	-.32	-.33	-.36	-.37	-.46	-.56	-.55
.802	-.20	-.22	-.23	-.25	-.24	-.26	-.26	-.27	-.26	-.30	-.31	-.32	-.31	-.32	-.53	-.54
.852	-.12	-.12	-.13	-.14	-.13	-.14	-.14	-.15	-.14	-.16	-.16	-.16	-.13	-.12	-.24	-.38
.902	-.03	-.04	-.04	-.05	-.04	-.04	-.05	-.04	-.03	-.05	-.04	-.04	-.02	-.01	-.04	-.17
.947	0	0	-.01	-.02	.01	-.01	0	0	.02	0	.01	.01	.04	.04	.04	-.06
1.000	.07	.06	.07	.06	.09	.08	.06	.08	.10	.08	.09	.10	.12	.13	.14	.07
Lower surface																
x/c \ M	0.30	0.41	0.50	0.55	0.61	0.63	0.65	0.68	0.71	0.73	0.75	0.78	0.81	0.84	0.87	0.90
0.013	-1.13	-1.05	-1.00	-0.99	-0.95	-0.95	-0.94	-0.98	-1.06	-1.17	-1.10	-1.61	-1.63	-1.54	-1.41	-1.27
.026	-1.14	-1.08	-1.02	-1.01	-.96	-.96	-.95	-.97	-1.04	-1.16	-1.10	-1.52	-1.50	-1.41	-1.29	-1.17
.050	-.86	-.94	-.95	-.96	-.94	-.94	-.94	-.96	-.89	-1.06	-1.03	-1.39	-1.34	-1.26	-1.16	-1.04
.074	-.54	-.73	-.83	-.86	-.86	-.88	-.89	-.90	-.78	-.95	-.93	-1.28	-1.25	-1.18	-1.08	-.97
.101	-.32	-.48	-.63	-.70	-.74	-.77	-.80	-.81	-.79	-.80	-.82	-1.17	-1.18	-1.12	-1.03	----
.151	-.19	-.23	-.31	-.38	-.45	-.51	-.56	-.58	-.54	-.54	-.62	-.48	-1.08	-1.08	-.97	-.87
.200	-.15	-.16	-.17	-.21	-.24	-.29	-.34	-.36	-.34	-.34	-.43	-.20	-.50	-.99	-.94	----
.252	-.13	-.13	-.13	-.14	-.14	-.16	-.19	-.21	-.20	-.23	-.28	-.14	-.11	-.63	-.91	-.82
.302	-.09	-.11	-.11	-.12	-.10	-.11	-.12	-.14	-.13	-.16	-.18	-.12	-.05	-.18	-.85	----
.352	-.09	-.11	-.10	-.11	-.09	-.10	-.10	-.11	-.10	-.13	-.13	-.12	-.06	-.02	-.59	-.83
.400	-.07	-.08	-.08	-.09	-.07	-.08	-.08	-.08	-.07	-.10	-.09	-.10	-.05	-.01	-.28	----
.451	-.04	-.05	-.05	-.06	-.04	-.04	-.05	-.05	-.04	-.06	-.05	-.06	-.02	.02	-.10	-.79
.501	-.02	-.03	-.03	-.04	-.01	-.02	-.02	-.02	0	-.03	-.02	-.03	0	.04	-.01	----
.551	-.01	-.01	-.01	0	0	0	0	0	.01	0	-.01	0	.02	.05	.05	-.57
.601	.02	.02	.01	.02	.03	.02	.02	.03	.04	.02	.03	.04	.05	.08	.09	----
.652	.04	.05	.04	.05	.06	.05	.05	.05	.07	.05	.05	.07	.08	.11	.13	-.28
.702	.07	.07	.06	.07	.08	.08	.08	.08	.09	.08	.08	.10	.11	.14	.16	----
.752	.09	.09	.09	.10	.11	.10	.10	.11	.12	.11	.11	.13	.14	.16	.18	-.08
.801	.11	.11	.11	.12	.13	.12	.12	.12	.14	.13	.13	.15	.16	.18	.20	----
.851	.11	.11	.11	.12	.12	.12	.12	.12	.14	.13	.13	.15	.16	.18	.19	.06
.902	.11	.11	.11	.12	.13	.12	.13	.12	.14	.13	.13	.15	.16	.17	.19	----
.951	.08	.07	.07	.08	.09	.08	.09	.08	.10	.09	.09	.11	.11	.13	.13	.10

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(d) $\alpha_o = -2^o$

Upper surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.73	0.76	0.78	0.81	0.84	0.86	0.89	0.92
0	0.42	0.44	0.54	0.60	0.66	0.69	0.72	0.73	0.75	0.79	0.82	0.85	0.90	0.92	0.92	0.94	0.96
.006	.71	.72	.77	.77	.78	.78	.79	.79	.78	.81	.82	.82	.84	.84	.88	.92	.95
.013	.40	.40	.44	.43	.45	.44	.46	.45	.46	.48	.49	.50	.52	.54	.58	.63	.66
.025	.21	.19	.22	.22	.22	.23	.24	.24	.24	.26	.28	.28	.31	.33	.38	.43	.46
.051	.08	.08	.12	.12	.12	.12	.12	.12	.12	.14	.15	.16	.20	.21	.26	.31	.34
.075	-.02	-.02	.01	0	.01	0	.01	0	0	.02	.02	.04	.06	.08	.13	.18	.23
.101	-.06	-.09	-.06	-.07	-.08	-.08	-.08	-.09	-.09	-.08	-.08	-.07	-.04	-.02	.02	.08	.13
.150	-.12	-.16	-.13	-.14	-.14	-.15	-.15	-.16	-.17	-.16	-.16	-.16	-.14	-.12	-.07	-.02	.04
.200	-.18	-.20	-.18	-.19	-.19	-.21	-.21	-.23	-.24	-.24	-.24	-.24	-.22	-.19	-.15	-.10	-.05
.251	-.22	-.25	-.24	-.25	-.26	-.28	-.28	-.30	-.31	-.32	-.32	-.34	-.33	-.31	-.26	-.21	-.16
.298	-.24	-.27	-.26	-.28	-.29	-.31	-.31	-.34	-.35	-.36	-.38	-.39	-.38	-.38	-.33	-.28	-.23
.352	-.26	-.30	-.28	-.30	-.32	-.33	-.34	-.37	-.39	-.40	-.42	-.44	-.44	-.44	-.39	-.34	-.29
.400	-.28	-.31	-.29	-.32	-.33	-.35	-.36	-.39	-.41	-.43	-.45	-.48	-.50	-.49	-.44	-.40	-.34
.450	-.27	-.31	-.30	-.32	-.34	-.36	-.36	-.39	-.41	-.43	-.46	-.49	-.51	-.52	-.48	-.44	-.38
.500	-.29	-.32	-.31	-.34	-.35	-.37	-.38	-.41	-.43	-.45	-.49	-.54	-.59	-.61	-.56	-.52	-.45
.551	-.28	-.32	-.31	-.33	-.34	-.36	-.37	-.40	-.42	-.44	-.47	-.52	-.62	-.65	-.61	-.57	-.51
.600	-.27	-.31	-.31	-.33	-.34	-.36	-.37	-.39	-.42	-.43	-.46	-.51	-.62	-.72	-.68	-.63	-.57
.651	-.25	-.28	-.28	-.30	-.31	-.32	-.34	-.36	-.39	-.40	-.42	-.45	-.55	-.70	-.68	-.65	-.60
.701	-.25	-.28	-.28	-.30	-.30	-.32	-.32	-.34	-.37	-.38	-.39	-.42	-.49	-.64	-.64	-.65	-.62
.752	-.22	-.26	-.25	-.26	-.27	-.29	-.30	-.32	-.34	-.35	-.37	-.39	-.38	-.60	-.61	-.60	-.61
.802	-.21	-.23	-.22	-.24	-.24	-.25	-.25	-.27	-.29	-.30	-.31	-.31	-.25	-.36	-.56	-.56	-.58
.852	-.11	-.13	-.12	-.13	-.12	-.14	-.13	-.15	-.16	-.15	-.15	-.15	-.11	-.13	-.29	-.40	-.50
.902	-.02	-.04	-.03	-.04	-.03	-.04	-.03	-.04	-.05	-.05	-.05	-.05	-.02	-.01	-.13	-.22	-.36
.947	.01	-.01	.01	0	.02	.01	.02	.01	0	0	.01	0	.04	.06	-.01	-.12	-.25
1.000	.09	.08	.09	.08	.10	.10	.10	.10	.09	.10	.10	.10	.12	.14	.10	0	-.12

Lower surface

x/c \ M	0.31	0.41	0.51	0.56	0.61	0.63	0.66	0.68	0.71	0.73	0.76	0.78	0.81	0.84	0.86	0.89	0.92
0.013	-1.32	-1.40	-1.28	-1.19	-1.08	-1.07	-1.09	-1.15	-1.10	-1.17	-1.20	-1.25	-1.44	-1.40	-1.31	-1.22	-1.15
.026	-.48	-.60	-.82	-.96	-1.03	-1.04	-1.04	-1.19	-1.08	-1.13	-1.20	-1.24	-1.30	-1.26	-1.20	-1.14	-1.05
.050	-.29	-.32	-.36	-.43	-.60	-.65	-.68	-.73	-.80	-.82	-.85	-1.02	-1.16	-1.10	-1.06	-1.01	-.92
.074	-.20	-.23	-.24	-.26	-.34	-.38	-.41	-.46	-.54	-.57	-.51	-.65	-1.05	-1.01	-.97	-.93	-.85
.101	-.15	-.18	-.18	-.18	-.21	-.22	-.24	-.28	-.34	-.36	-.40	-.40	-.65	-.93	-.92	----	----
.151	-.11	-.13	-.13	-.14	-.13	-.13	-.14	-.16	-.17	-.18	-.20	-.20	-.08	-.45	-.84	-.82	-.76
.200	-.08	-.10	-.10	-.10	-.10	-.10	-.11	-.12	-.13	-.12	-.13	-.13	-.06	-.06	-.78	----	----
.252	-.05	-.08	-.07	-.07	-.08	-.09	-.08	-.10	-.10	-.09	-.10	-.09	-.06	-.02	-.35	-.78	-.72
.302	-.03	-.06	-.06	-.06	-.06	-.07	-.07	-.08	-.09	-.08	-.07	-.08	-.06	-.02	-.08	----	----
.352	-.04	-.06	-.06	-.06	-.06	-.07	-.07	-.08	-.09	-.08	-.08	-.08	-.06	-.05	-.01	-.70	-.71
.400	-.02	-.04	-.04	-.04	-.04	-.04	-.05	-.06	-.06	-.05	-.05	-.06	-.04	-.04	.01	----	----
.451	.01	-.01	-.01	-.01	-.01	-.01	-.01	-.02	-.03	-.02	-.02	-.02	0	0	.03	-.38	-.73
.501	.03	.01	.02	.01	.01	.01	.01	0	0	.01	.01	.01	.02	.03	.05	----	----
.551	.02	.01	.02	.02	.02	.02	.04	.02	.03	.03	.03	.03	.04	.05	.06	-.04	-.66
.601	.04	.04	.05	.05	.05	.06	.07	.06	.06	.06	.06	.07	.07	.08	.09	----	----
.652	.06	.06	.08	.08	.08	.10	.07	.08	.09	.09	.09	.09	.11	.11	.11	.10	-.52
.702	.09	.09	.10	.10	.11	.11	.12	.11	.12	.12	.12	.12	.14	.14	.14	----	----
.752	.11	.11	.13	.13	.13	.13	.15	.14	.14	.15	.15	.15	.16	.17	.18	.16	-.30
.801	.13	.13	.14	.15	.15	.15	.17	.16	.16	.16	.17	.17	.19	.20	.19	----	----
.851	.13	.12	.13	.14	.15	.14	.16	.15	.16	.16	.16	.16	.18	.19	.18	.17	-.08
.902	.12	.13	.13	.14	.15	.14	.16	.15	.16	.16	.16	.16	.18	.19	.17	----	----
.951	.09	.09	.09	.10	.10	.09	.11	.10	.11	.11	.11	.11	.13	.13	.11	.07	-.05

NACA

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(e) $\alpha_0 = 0^\circ$

Upper surface																	
x/c \ M	0.31	0.41	0.51	0.56	0.60	0.63	0.66	0.68	0.70	0.73	0.76	0.78	0.81	0.84	0.87	0.90	0.92
0	0.96	1.00	1.04	1.04	1.06	1.06	1.07	1.10	1.11	1.12	1.12	1.14	1.14	1.13	1.10	1.10	1.10
.006	.14	.13	.16	.19	.21	.21	.24	.26	.28	.30	.33	.38	.45	.56	.66	.74	.79
.013	-.15	-.17	-.15	-.14	-.13	-.14	-.12	-.10	-.09	-.06	-.04	.02	.09	.22	.32	.41	.48
.025	-.23	-.26	-.26	-.25	-.26	-.27	-.26	-.24	-.25	-.23	-.22	-.17	-.10	.02	.13	.22	.28
.051	-.21	-.24	-.23	-.23	-.25	-.26	-.24	-.24	-.25	-.23	-.23	-.19	-.13	-.03	.06	.14	.20
.075	-.26	-.31	-.30	-.30	-.32	-.34	-.33	-.34	-.35	-.34	-.34	-.31	-.24	-.15	-.06	.01	.08
.101	-.30	-.35	-.34	-.34	-.37	-.40	-.38	-.40	-.42	-.42	-.43	-.41	-.36	-.26	-.17	-.09	-.02
.150	-.31	-.36	-.36	-.36	-.39	-.42	-.41	-.43	-.45	-.46	-.47	-.46	-.42	-.33	-.25	-.18	-.10
.200	-.33	-.37	-.37	-.39	-.42	-.45	-.44	-.46	-.48	-.49	-.52	-.50	-.45	-.37	-.30	-.22	-.15
.251	-.37	-.41	-.41	-.43	-.46	-.49	-.48	-.51	-.55	-.57	-.62	-.61	-.56	-.48	-.40	-.33	-.26
.298	-.38	-.42	-.42	-.43	-.47	-.51	-.49	-.53	-.57	-.59	-.66	-.68	-.63	-.56	-.48	-.41	-.33
.352	-.38	-.42	-.42	-.44	-.48	-.51	-.50	-.54	-.58	-.60	-.68	-.73	-.69	-.62	-.54	-.47	-.39
.400	-.37	-.42	-.42	-.44	-.48	-.51	-.50	-.54	-.58	-.61	-.70	-.77	-.74	-.67	-.59	-.52	-.45
.450	-.37	-.42	-.43	-.44	-.48	-.51	-.50	-.54	-.58	-.61	-.70	-.80	-.79	-.72	-.64	-.57	-.50
.500	-.36	-.42	-.42	-.43	-.47	-.51	-.49	-.53	-.57	-.60	-.68	-.84	-.85	-.78	-.70	-.63	-.55
.551	-.35	-.40	-.40	-.41	-.45	-.48	-.46	-.50	-.54	-.56	-.64	-.81	-.88	-.82	-.74	-.68	-.60
.600	-.33	-.38	-.39	-.40	-.43	-.46	-.45	-.48	-.52	-.54	-.61	-.78	-.90	-.88	-.80	-.73	-.65
.651	-.30	-.35	-.36	-.37	-.40	-.43	-.41	-.44	-.48	-.48	-.54	-.70	-.84	-.81	-.78	-.75	-.67
.701	-.28	-.32	-.33	-.33	-.36	-.39	-.38	-.40	-.44	-.43	-.45	-.45	-.81	-.77	-.72	-.71	-.68
.752	-.25	-.30	-.30	-.31	-.33	-.36	-.34	-.36	-.38	-.37	-.39	-.32	-.55	-.71	-.70	-.69	-.69
.802	-.22	-.26	-.26	-.26	-.27	-.30	-.27	-.28	-.31	-.29	-.32	-.27	-.29	-.43	-.51	-.64	-.62
.852	-.12	-.16	-.14	-.14	-.15	-.16	-.14	-.14	-.17	-.16	-.17	-.13	-.15	-.30	-.37	-.49	-.56
.902	-.03	-.06	-.05	-.05	-.05	-.06	-.05	-.05	-.07	-.06	-.07	-.04	-.03	-.17	-.27	-.38	-.45
.947	.01	-.01	0	0	0	-.02	.01	.01	-.01	0	-.01	.02	.04	-.06	-.18	-.30	-.35
1.000	.08	.12	.13	.12	.12	.10	.12	.14	.12	.14	.12	.14	.12	.04	-.08	-.21	-.24
Lower surface																	
x/c \ M	0.31	0.41	0.51	0.56	0.60	0.63	0.66	0.68	0.70	0.73	0.76	0.78	0.81	0.84	0.87	0.90	0.92
0.013	-0.21	-0.23	-0.24	-0.26	-0.29	-0.32	-0.30	-0.35	-0.38	-0.40	-0.46	-0.50	-0.58	-0.69	-0.89	-1.03	-0.96
.026	-.05	-.08	-.08	-.08	-.09	-.10	-.08	-.08	-.09	-.09	-.16	-.26	-.44	-.67	-.84	-.90	-.85
.050	0	-.01	-.01	-.01	-.02	-.04	-.02	-.03	-.04	-.03	-.05	-.04	-.04	-.08	-.65	-.74	-.71
.074	.03	.02	.02	.03	.02	0	.02	.02	.01	.01	0	.01	-.01	-.02	-.25	-.65	-.62
.101	.04	.02	.03	.04	.03	.01	.04	.03	.02	.03	.01	.02	.01	-.02	-.05	----	----
.151	.05	.04	.04	.04	.03	.02	.04	.04	.03	.04	.02	.02	.02	-.01	-.03	-.21	-.51
.200	.05	.04	.04	.04	.04	.02	.04	.04	.03	.04	.02	.03	.03	-.01	-.04	----	----
.252	.06	.04	.04	.04	.04	.02	.04	.04	.03	.04	.03	.03	.03	.01	-.03	-.02	-.24
.302	.06	.04	.04	.04	.04	.02	.04	.04	.04	.04	.03	.04	.04	.02	-.03	----	----
.352	.05	.03	.03	.03	.03	.01	.03	.03	.02	.03	.01	.02	.02	0	-.04	-.05	-.02
.400	.07	.04	.04	.04	.04	.02	.04	.04	.03	.04	.02	.04	.03	.02	-.03	----	----
.451	.08	.05	.06	.06	.06	.05	.07	.07	.06	.07	.05	.06	.06	.05	.01	-.01	.04
.501	.09	.07	.07	.08	.08	.06	.08	.09	.08	.08	.07	.08	.08	.05	.04	----	----
.551	.09	.07	.08	.08	.09	.10	.09	.09	.08	.09	.10	.10	.10	.08	.05	.04	.07
.601	.11	.09	.11	.10	.11	.13	.12	.11	.11	.12	.13	.12	.12	.11	.08	----	----
.652	.13	.11	.13	.12	.13	.15	.14	.14	.13	.14	.15	.15	.15	.14	.11	.09	.12
.702	.15	.13	.15	.15	.15	.18	.16	.16	.15	.17	.18	.17	.17	.16	.14	----	----
.752	.17	.16	.17	.17	.18	.19	.19	.19	.18	.19	.20	.20	.20	.19	.16	.15	.18
.801	.18	.17	.18	.18	.19	.21	.20	.20	.19	.21	.22	.22	.22	.20	.18	----	----
.851	.15	.15	.17	.17	.18	.19	.18	.19	.18	.19	.20	.20	.20	.18	.15	.12	.14
.902	.16	.15	.17	.16	.17	.18	.18	.18	.17	.18	.19	.19	.19	.16	.13	----	----
.951	.11	.09	.11	.10	.11	.13	.12	.12	.11	.12	.13	.13	.13	.07	.03	-.04	-.03

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(f) $\alpha_0 = 2^\circ$

Upper surface																
x/c \ M	0.31	0.40	0.51	0.55	0.61	0.63	0.66	0.68	0.71	0.74	0.75	0.79	0.82	0.85	0.87	0.90
0	0.91	0.94	1.01	1.01	1.04	1.05	1.07	1.08	1.10	1.12	1.14	1.16	1.18	1.18	1.19	1.20
.006	-.83	-.93	-.86	-.89	-.84	-.82	-.76	-.72	-.62	-.52	-.44	-.22	.02	.20	.35	.50
.013	-.89	-1.00	-.98	-1.04	-1.04	-1.06	-1.04	-1.03	-.95	-.86	-.78	-.59	-.35	-.17	0	.16
.025	-.77	-.88	-.86	-.91	-.93	-.97	-.97	-1.02	-1.04	-1.05	-.99	-.78	-.52	-.34	-.18	-.02
.051	-.59	-.66	-.64	-.69	-.70	-.72	-.72	-.76	-.74	-.76	-.73	-.55	-.37	-.26	-.16	-.04
.075	-.56	-.65	-.64	-.68	-.70	-.73	-.73	-.76	-.76	-.74	-.70	-.58	-.44	-.35	-.26	-.15
.101	-.57	-.65	-.64	-.69	-.71	-.75	-.76	-.81	-.85	-.86	-.82	-.71	-.58	-.48	-.38	-.27
.150	-.54	-.60	-.59	-.64	-.67	-.69	-.70	-.75	-.79	-.93	-.91	-.80	-.66	-.56	-.46	-.35
.200	-.51	-.58	-.57	-.62	-.64	-.66	-.67	-.72	-.75	-.89	-.91	-.81	-.68	-.58	-.49	-.38
.251	-.52	-.60	-.58	-.64	-.66	-.68	-.70	-.75	-.80	-.90	-.95	-.86	-.74	-.64	-.56	-.45
.298	-.51	-.58	-.57	-.62	-.64	-.67	-.68	-.74	-.79	-.91	-.98	-.91	-.79	-.71	-.62	-.51
.352	-.50	-.56	-.56	-.60	-.63	-.65	-.66	-.71	-.76	-.93	-1.01	-.94	-.83	-.75	-.66	-.56
.400	-.49	-.55	-.54	-.59	-.61	-.63	-.64	-.69	-.74	-.92	-1.03	-.98	-.87	-.79	-.71	-.61
.450	-.49	-.56	-.57	-.63	-.65	-.66	-.66	-.71	-.75	-.88	-1.05	-1.01	-.91	-.84	-.76	-.66
.500	-.45	-.51	-.51	-.55	-.57	-.58	-.60	-.64	-.67	-.82	-1.00	-1.04	-.95	-.88	-.80	-.71
.551	-.42	-.48	-.48	-.51	-.53	-.54	-.55	-.58	-.60	-.66	-.96	-.99	-.93	-.90	-.85	-.74
.600	-.40	-.45	-.44	-.48	-.50	-.50	-.50	-.53	-.53	-.50	-.82	-.97	-.90	-.87	-.88	-.80
.651	-.36	-.41	-.40	-.43	-.44	-.45	-.45	-.47	-.47	-.46	-.48	-.94	-.88	-.85	-.84	-.82
.701	-.31	-.36	-.36	-.39	-.40	-.40	-.40	-.42	-.42	-.43	-.36	-.64	-.71	-.78	-.81	-.82
.752	-.29	-.34	-.32	-.36	-.36	-.36	-.36	-.37	-.37	-.38	-.32	-.44	-.52	-.59	-.75	-.82
.802	-.23	-.28	-.27	-.30	-.30	-.30	-.29	-.30	-.30	-.31	-.27	-.28	-.40	-.46	-.60	-.79
.852	-.13	-.17	-.15	-.18	-.17	-.17	-.16	-.16	-.16	-.16	-.15	-.15	-.30	-.39	-.50	-.74
.902	-.04	-.08	-.06	-.08	-.07	-.07	-.06	-.06	-.06	-.05	-.05	-.05	-.21	-.32	-.43	-.67
.947	.01	-.03	-.01	-.02	-.01	-.01	0	0	.01	.02	.01	.01	-.13	-.26	-.38	-.59
1.000	.09	.05	.12	.07	.08	.08	.09	.09	.10	.11	.10	.07	-.05	-.18	-.31	-.48
Lower surface																
x/c \ M	0.31	0.40	0.51	0.55	0.61	0.63	0.66	0.68	0.71	0.74	0.75	0.79	0.82	0.85	0.87	0.90
0.013	0.36	0.34	0.35	0.34	0.35	0.35	0.35	0.34	0.34	0.34	0.30	0.25	0.14	-0.02	-0.21	-0.42
.026	.31	.31	.33	.32	.34	.34	.34	.34	.34	.34	.32	.28	.20	.09	-.07	-.36
.050	.27	.24	.26	.26	.27	.27	.28	.28	.28	.28	.27	.25	.20	.13	.07	.04
.074	.25	.23	.25	.24	.26	.26	.27	.26	.27	.27	.26	.25	.20	.14	.10	.06
.101	.22	.20	.22	.21	.23	.24	.24	.24	.25	.25	.24	.23	.19	.14	----	----
.151	.20	.16	.20	.18	.20	.20	.21	.21	.22	.22	.20	.20	.17	.13	.08	.04
.200	.18	.15	.17	.16	.18	.18	.19	.18	.19	.19	.18	.18	.15	.12	----	----
.252	.16	.14	.15	.14	.16	.16	.18	.17	.18	.18	.17	.17	.14	.11	.07	.03
.302	.15	.12	.14	.14	.15	.16	.16	.16	.17	.17	.16	.16	.14	.10	----	----
.352	.14	.11	.13	.12	.14	.14	.14	.14	.16	.16	.15	.14	.12	.08	.04	.01
.400	.14	.11	.13	.12	.14	.13	.14	.14	.15	.15	.14	.14	.12	.08	----	----
.451	.14	.11	.13	.12	.14	.14	.14	.14	.15	.16	.15	.14	.13	.09	.06	.03
.501	.15	.12	.14	.13	.14	.14	.15	.15	.16	.16	.16	.16	.14	.10	----	----
.551	.13	.11	.13	.13	.14	.15	.16	.15	.17	.16	.16	.16	.14	.11	.08	.06
.601	.14	.12	.15	.15	.16	.16	.17	.17	.18	.18	.18	.18	.16	.13	----	----
.652	.16	.14	.16	.16	.17	.18	.19	.19	.20	.20	.20	.20	.18	.15	.12	.11
.702	.17	.15	.18	.18	.19	.19	.19	.20	.22	.22	.21	.22	.20	.17	----	----
.752	.19	.17	.20	.20	.21	.21	.22	.22	.24	.24	.24	.24	.22	.19	.16	.16
.801	.22	.17	.21	.21	.22	.22	.23	.23	.25	.25	.25	.25	.23	.20	----	----
.851	.21	.16	.19	.19	.20	.20	.21	.21	.22	.23	.22	.23	.20	.17	.13	.12
.902	.22	.15	.18	.17	.18	.19	.20	.19	.21	.21	.21	.21	.17	.13	----	----
.951	.10	.08	.11	.09	.10	.10	.11	.11	.13	.13	.13	.12	.06	0	-.08	-.08

NACA

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(g) $\alpha_o = 4^\circ$

Upper surface

x/c \ M	0.31	0.41	0.51	0.53	0.55	0.58	0.60	0.63	0.66	0.68	0.71	0.73	0.76	0.79	0.82	0.84	0.87
0	-0.09	0.04	0.24	0.30	0.34	0.45	0.53	0.60	0.68	0.74	0.81	0.90	1.00	1.10	1.15	1.18	1.18
.006	-2.11	-2.21	-2.45	-2.48	-2.50	-2.39	-2.34	-2.12	-1.94	-1.72	-1.54	-1.30	-.95	-.62	-.39	-.19	-.05
.013	-1.75	-1.87	-2.14	-2.21	-2.24	-2.18	-2.09	-2.08	-1.92	-1.73	-1.55	-1.33	-1.06	-.86	-.69	-.52	-.39
.025	-1.40	-1.41	-1.52	-1.73	-1.98	-1.99	-1.92	-1.94	-1.99	-1.82	-1.65	-1.50	-1.27	-1.08	-.91	-.73	-.60
.051	-.94	-.97	-1.08	-1.09	-1.09	-1.01	-1.57	-1.81	-1.74	-1.67	-1.55	-1.40	-1.19	-1.00	-.82	-.64	-.49
.075	-.89	-.91	-1.01	-1.04	-1.07	-1.05	-.98	-1.51	-1.64	-1.61	-1.50	-1.36	-1.15	-.97	-.80	-.62	-.48
.101	-.83	-.85	-.95	-.98	-1.02	-1.02	-1.00	-.92	-1.52	-1.59	-1.50	-1.37	-1.17	-1.00	-.84	-.68	-.56
.150	-.73	-.74	-.83	-.86	-.89	-.90	-.91	-.91	-.84	-1.50	-1.48	-1.37	-1.20	-1.03	-.89	-.74	-.65
.200	-.67	-.69	-.78	-.80	-.83	-.85	-.84	-.88	-.84	-1.40	-1.45	-1.35	-1.19	-1.04	-.90	-.77	-.68
.251	-.66	-.67	-.76	-.78	-.81	-.84	-.83	-.88	-.88	-1.01	-1.46	-1.38	-1.22	-1.08	-.95	-.83	-.74
.298	-.63	-.64	-.72	-.74	-.78	-.79	-.79	-.83	-.85	-.71	-1.42	-1.41	-1.26	-1.12	-1.00	-.88	-.80
.352	-.60	-.60	-.68	-.71	-.74	-.75	-.75	-.80	-.81	-.74	-1.34	-1.42	-1.29	-1.16	-1.05	-.93	-.84
.400	-.57	-.58	-.66	-.67	-.70	-.71	-.71	-.75	-.70	-.75	-1.15	-1.37	-1.27	-1.15	-1.07	-.96	-.88
.450	-.62	-.63	-.71	-.73	-.75	-.76	-.76	-.80	-.82	-.84	-.73	-1.35	-1.24	-1.12	-1.05	-.99	-.91
.500	-.53	-.53	-.59	-.61	-.64	-.64	-.64	-.67	-.68	-.70	-.56	-1.28	-1.23	-1.10	-1.03	-1.00	-.95
.551	-.47	-.47	-.54	-.55	-.58	-.58	-.57	-.60	-.61	-.63	-.52	-.93	-1.12	-1.05	-1.01	-.96	-.98
.600	-.43	-.44	-.49	-.51	-.53	-.52	-.52	-.54	-.55	-.56	-.50	-.62	-.85	-.87	-.93	-.95	-.98
.651	-.39	-.39	-.44	-.45	-.47	-.47	-.46	-.48	-.48	-.50	-.46	-.45	-.66	-.70	-.76	-.88	-.95
.701	-.35	-.34	-.39	-.40	-.41	-.41	-.40	-.42	-.42	-.43	-.41	-.34	-.51	-.59	-.65	-.75	-.90
.752	-.31	-.29	-.34	-.34	-.36	-.35	-.35	-.36	-.36	-.37	-.36	-.28	-.39	-.50	-.57	-.64	-.84
.802	-.25	-.24	-.28	-.28	-.29	-.28	-.27	-.28	-.28	-.29	-.28	-.23	-.29	-.42	-.51	-.56	-.74
.852	-.14	-.13	-.16	-.17	-.18	-.16	-.16	-.16	-.16	-.16	-.16	-.13	-.20	-.34	-.45	-.52	-.66
.902	-.06	-.05	-.08	-.08	-.09	-.08	-.07	-.08	-.07	-.07	-.06	-.06	-.12	-.28	-.40	-.48	-.60
.947	-.01	0	-.02	-.02	-.04	-.02	-.02	-.03	-.02	-.01	0	-.01	-.07	-.22	-.35	-.44	-.56
1.000	.07	.07	.05	.04	.03	.04	.04	.03	.04	.06	.08	.05	-.01	-.16	-.29	-.37	-.49

Lower surface

x/c \ M	0.31	0.41	0.51	0.53	0.55	0.58	0.60	0.63	0.66	0.68	0.71	0.73	0.76	0.79	0.82	0.84	0.87
0.013	0.72	0.74	0.73	0.72	0.71	0.70	0.70	0.68	0.69	0.70	0.68	0.66	0.60	0.52	0.42	0.34	0.26
.026	.61	.62	.61	.61	.59	.60	.60	.59	.60	.60	.60	.58	.54	.48	.41	.35	.30
.050	.48	.48	.48	.48	.46	.47	.48	.46	.48	.49	.48	.47	.44	.39	.34	.30	.27
.074	.42	.44	.44	.44	.42	.43	.44	.42	.44	.44	.44	.44	.42	.37	.32	.29	.26
.101	.37	.39	.38	.38	.38	.38	.39	.37	.40	.40	.40	.39	.38	.34	.29	----	----
.151	.32	.34	.32	.32	.31	.32	.33	.32	.34	.34	.34	.34	.32	.29	.25	.22	.20
.200	.28	.29	.28	.28	.27	.28	.29	.28	.29	.30	.30	.30	.29	.25	.22	----	----
.252	.26	.27	.25	.25	.24	.24	.26	.24	.26	.27	.27	.27	.26	.23	.19	.18	.15
.302	.24	.25	.23	.23	.22	.23	.24	.22	.24	.25	.25	.25	.24	.22	.18	----	----
.352	.21	.23	.20	.20	.19	.20	.21	.20	.22	.23	.23	.22	.22	.18	.15	.14	.12
.400	.20	.22	.19	.19	.18	.19	.20	.19	.21	.21	.21	.21	.21	.17	.14	----	----
.451	.20	.21	.19	.19	.18	.19	.20	.18	.20	.20	.21	.21	.21	.18	.14	.12	.10
.501	.20	.21	.19	.19	.18	.18	.20	.18	.20	.20	.22	.21	.21	.18	.14	----	----
.551	.18	.19	.18	.19	.19	.20	.20	.20	.21	.21	.21	.22	.20	.18	.14	.13	.11
.601	.19	.20	.20	.20	.20	.21	.21	.21	.22	.22	.22	.23	.21	.19	.16	----	----
.652	.19	.21	.20	.20	.21	.21	.22	.22	.23	.23	.23	.24	.22	.20	.17	.15	.14
.702	.20	.22	.20	.21	.22	.22	.23	.23	.24	.24	.24	.25	.23	.21	.18	----	----
.752	.21	.23	.22	.22	.23	.24	.24	.24	.25	.25	.26	.26	.25	.23	.19	.18	.16
.801	.22	.24	.23	.23	.23	.24	.24	.24	.25	.28	.27	.27	.25	.23	.20	----	----
.851	.21	.23	.21	.21	.21	.22	.22	.23	.23	.23	.24	.25	.22	.20	.16	.14	.13
.902	.19	.21	.19	.19	.18	.19	.19	.19	.20	.20	.21	.22	.19	.15	.11	----	----
.951	.12	.13	.09	.09	.08	.09	.09	.09	.09	.10	.11	.12	.07	0	-.07	-.09	-.10

NACA

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(h) $\alpha_o = 6^\circ$

Upper surface

x/c \ M	0.30	0.41	0.51	0.53	0.56	0.58	0.60	0.63	0.66	0.69	0.71	0.74	0.77	0.80	0.82	0.84
0	-1.84	-1.28	-0.58	-0.44	-0.38	-0.14	-0.01	0.14	0.26	0.40	0.54	0.72	0.86	0.99	1.08	1.12
.006	-3.88	-3.56	-2.84	-2.80	-2.73	-2.59	-2.85	-2.59	-2.29	-2.06	-1.86	-1.58	-1.30	-.99	-.70	-.53
.013	-2.73	-3.38	-2.80	-2.77	-2.70	-2.49	-2.84	-2.61	-2.33	-2.12	-1.92	-1.63	-1.36	-1.05	-.84	-.73
.025	-1.95	-2.07	-2.56	-2.60	-2.63	-2.48	-2.66	-2.60	-2.34	-2.12	-1.95	-1.70	-1.45	-1.22	-1.04	-.93
.051	-1.36	-1.46	-1.95	-2.02	-2.09	-2.31	-2.55	-2.36	-2.14	-1.94	-1.79	-1.57	-1.37	-1.15	-.99	-.88
.075	-1.22	-1.27	-1.54	-1.62	-1.72	-1.80	-2.45	-2.24	-2.06	-1.88	-1.74	-1.52	-1.34	-1.13	-.97	-.86
.101	-1.10	-1.14	-1.26	-1.32	-1.41	-1.48	-2.01	-2.16	-2.04	-1.88	-1.74	-1.54	-1.36	-1.16	-1.01	-.90
.150	-.94	-.96	-1.02	-1.04	-1.08	-1.13	-1.01	-2.02	-1.98	-1.84	-1.73	-1.53	-1.37	-1.17	-1.04	-.93
.200	-.84	-.87	-.91	-.94	-.94	-.97	-.88	-1.11	-1.89	-1.80	-1.70	-1.52	-1.35	-1.18	-1.04	-.94
.251	-.80	-.82	-.86	-.88	-.87	-.90	-.88	-.80	-1.80	-1.78	-1.70	-1.52	-1.37	-1.20	-1.08	-.98
.298	-.74	-.76	-.80	-.82	-.82	-.84	-.85	-.77	-1.22	-1.74	-1.68	-1.53	-1.38	-1.22	-1.12	-1.02
.352	-.69	-.71	-.75	-.77	-.77	-.79	-.80	-.76	-.73	-1.62	-1.64	-1.50	-1.35	-1.20	-1.12	-1.06
.400	-.67	-.67	-.71	-.72	-.72	-.74	-.76	-.74	-.62	-1.14	-1.57	-1.47	-1.32	-1.17	-1.10	-1.06
.450	-.68	-.69	-.73	-.75	-.74	-.76	-.78	-.78	-.66	-.75	-1.16	-1.34	-1.26	-1.14	-1.09	-1.06
.500	-.57	-.58	-.61	-.62	-.62	-.64	-.65	-.65	-.58	-.56	-.85	-1.02	-1.05	-1.01	-1.05	-1.04
.551	-.52	-.53	-.56	-.57	-.57	-.57	-.58	-.59	-.54	-.48	-.65	-.82	-.86	-.84	-.93	-1.00
.600	-.47	-.48	-.50	-.51	-.51	-.51	-.53	-.52	-.49	-.42	-.52	-.68	-.74	-.74	-.81	-.92
.651	-.40	-.42	-.44	-.45	-.44	-.45	-.46	-.46	-.44	-.38	-.42	-.55	-.66	-.68	-.72	-.82
.701	-.36	-.36	-.38	-.39	-.38	-.38	-.39	-.39	-.38	-.33	-.36	-.46	-.58	-.62	-.66	-.74
.752	-.31	-.31	-.32	-.33	-.32	-.33	-.33	-.33	-.32	-.28	-.30	-.37	-.50	-.57	-.62	-.68
.802	-.25	-.25	-.26	-.27	-.26	-.26	-.26	-.26	-.26	-.24	-.26	-.31	-.43	-.52	-.58	-.63
.852	-.14	-.15	-.16	-.18	-.16	-.16	-.16	-.16	-.15	-.13	-.17	-.24	-.36	-.48	-.55	-.61
.902	-.06	-.07	-.09	-.10	-.09	-.09	-.09	-.08	-.07	-.06	-.11	-.18	-.31	-.43	-.52	-.58
.947	-.02	-.02	-.04	-.06	-.05	-.04	-.05	-.04	-.02	-.01	-.07	-.13	-.26	-.39	-.49	-.55
1.000	.04	.01	.01	-.01	0	0	0	.02	.04	.04	-.02	-.08	-.21	-.32	-.43	-.49

Lower surface

x/c \ M	0.30	0.41	0.51	0.53	0.56	0.58	0.60	0.63	0.66	0.69	0.71	0.74	0.77	0.80	0.82	0.84
0.013	0.93	0.92	0.90	0.90	0.90	0.88	0.88	0.89	0.89	0.87	0.83	0.79	0.73	0.68	0.62	0.58
.026	.81	.79	.78	.77	.73	.76	.77	.77	.78	.76	.72	.70	.65	.61	.57	.54
.050	.63	.63	.62	.61	.62	.61	.62	.62	.63	.62	.60	.58	.53	.50	.47	.45
.074	.57	.56	.54	.55	.56	.55	.56	.56	.58	.58	.55	.53	.49	.47	.44	.42
.101	.51	.50	.50	.49	.50	.50	.50	.50	.52	.52	.49	.48	.44	.42	.40	----
.151	.42	.43	.42	.42	.43	.42	.44	.44	.45	.45	.42	.41	.38	.36	.34	.33
.200	.38	.38	.36	.36	.38	.37	.38	.38	.40	.40	.38	.36	.34	.32	.30	----
.252	.34	.34	.33	.32	.33	.33	.34	.34	.36	.36	.34	.32	.30	.29	.26	.26
.302	.31	.30	.30	.30	.30	.30	.31	.31	.32	.33	.31	.30	.27	.26	.24	----
.352	.28	.27	.27	.26	.27	.27	.28	.28	.30	.31	.28	.26	.24	.24	.21	.18
.400	.26	.26	.25	.24	.26	.25	.26	.26	.28	.28	.26	.24	.22	.21	.19	----
.451	.26	.24	.24	.24	.24	.24	.25	.26	.27	.28	.24	.24	.22	.20	.18	.18
.501	.25	.24	.24	.23	.24	.24	.24	.25	.26	.27	.24	.23	.21	.20	.18	----
.551	.22	.22	.23	.23	.23	.23	.23	.23	.25	.26	.24	.22	.20	.18	.16	.16
.601	.23	.23	.23	.23	.24	.23	.23	.24	.26	.26	.24	.23	.21	.18	.17	----
.652	.23	.23	.23	.23	.24	.24	.24	.24	.26	.26	.25	.23	.21	.19	.17	.18
.702	.23	.23	.24	.23	.24	.24	.24	.25	.27	.27	.25	.24	.22	.19	.18	----
.752	.24	.24	.25	.24	.25	.25	.25	.25	.28	.28	.26	.25	.22	.20	.19	.19
.801	.24	.24	.24	.24	.25	.25	.25	.25	.28	.28	.26	.24	.22	.20	.18	----
.851	.22	.22	.22	.22	.22	.22	.22	.23	.25	.25	.23	.21	.18	.15	.16	.14
.902	.20	.19	.19	.18	.19	.19	.18	.19	.21	.22	.19	.17	.13	.09	.07	----
.951	.12	.09	.08	.07	.07	.07	.06	.04	.09	.10	.06	.02	-.04	-.10	-.12	-.11

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(i) $\alpha_o = 8^o$

Upper surface															
x/c \ M	0.31	0.41	0.51	0.53	0.56	0.59	0.61	0.63	0.66	0.69	0.72	0.74	0.77	0.80	0.83
0	-1.71	-1.37	-0.82	-0.72	-0.59	-0.42	-0.38	-0.13	0.02	0.18	0.37	0.53	0.68	0.84	0.92
.006	-2.17	-2.02	-2.06	-2.08	-2.18	-2.16	-2.28	-2.25	-2.29	-2.19	-1.92	-1.72	-1.48	-1.24	-1.06
.013	-1.94	-1.81	-1.72	-1.72	-1.85	-1.95	-2.15	-2.12	-2.26	-2.22	-1.98	-1.78	-1.54	-1.30	-1.12
.025	-1.91	-1.79	-1.69	-1.67	-1.77	-1.86	-2.05	-2.07	-2.26	-2.23	-2.00	-1.82	-1.60	-1.38	-1.20
.051	-1.97	-1.83	-1.71	-1.69	-1.77	-1.80	-1.97	-2.00	-2.13	-2.07	-1.85	-1.68	-1.48	-1.30	-1.15
.075	-1.98	-1.87	-1.73	-1.71	-1.78	-1.78	-1.87	-1.92	-2.06	-2.00	-1.80	-1.63	-1.45	-1.28	-1.13
.101	-1.88	-1.85	-1.73	-1.71	-1.76	-1.72	-1.79	-1.85	-2.02	-1.98	-1.78	-1.64	-1.46	-1.30	-1.16
.150	-1.51	-1.61	-1.62	-1.62	-1.63	-1.57	-1.56	-1.66	-1.90	-1.91	-1.76	-1.63	-1.47	-1.31	-1.17
.200	-1.13	-1.26	-1.40	-1.42	-1.43	-1.36	-1.34	-1.37	-1.73	-1.81	-1.70	-1.60	-1.45	-1.30	-1.16
.251	-.90	-.98	-1.15	-1.18	-1.21	-1.14	-1.15	-1.14	-1.44	-1.67	-1.64	-1.58	-1.45	-1.30	-1.14
.298	-.76	-.82	-.96	-.98	-1.03	-.98	-1.00	-.99	-1.15	-1.40	-1.53	-1.53	-1.42	-1.30	-1.19
.352	-.67	-.70	-.80	-.82	-.87	-.84	-.86	-.86	-.92	-1.07	-1.25	-1.41	-1.38	-1.27	-1.17
.400	-.64	-.64	-.70	-.71	-.76	-.74	-.76	-.77	-.79	-.90	-1.00	-1.12	-1.28	-1.23	-1.15
.450	-.56	-.58	-.62	-.63	-.68	-.66	-.69	-.70	-.68	-.77	-.85	-.90	-1.04	-1.13	-1.11
.500	-.52	-.53	-.55	-.56	-.60	-.57	-.60	-.64	-.62	-.69	-.76	-.80	-.87	-.97	-1.01
.551	-.48	-.48	-.49	-.49	-.53	-.51	-.54	-.57	-.56	-.61	-.67	-.71	-.77	-.85	-.88
.600	-.42	-.42	-.44	-.44	-.48	-.46	-.48	-.52	-.51	-.54	-.60	-.65	-.71	-.78	-.80
.651	-.37	-.37	-.39	-.39	-.43	-.40	-.42	-.47	-.46	-.49	-.53	-.58	-.65	-.72	-.74
.701	-.32	-.32	-.34	-.34	-.38	-.35	-.38	-.42	-.42	-.44	-.47	-.52	-.60	-.68	-.70
.752	-.28	-.28	-.30	-.29	-.32	-.31	-.34	-.38	-.37	-.40	-.42	-.47	-.56	-.65	-.67
.802	-.23	-.23	-.26	-.26	-.29	-.27	-.30	-.34	-.34	-.36	-.37	-.43	-.52	-.62	-.64
.852	-.15	-.16	-.20	-.20	-.24	-.22	-.26	-.29	-.28	-.31	-.32	-.38	-.47	-.58	-.61
.902	-.10	-.12	-.16	-.16	-.20	-.19	-.22	-.26	-.24	-.26	-.24	-.34	-.43	-.55	-.58
.947	-.06	-.09	-.13	-.14	-.18	-.17	-.20	-.23	-.21	-.24	-.25	-.31	-.40	-.51	-.56
1.000	-.02	-.05	-.10	-.11	-.15	-.14	-.17	-.19	-.17	-.19	-.20	-.27	-.35	-.56	-.50
Lower surface															
x/c \ M	0.31	0.41	0.51	0.53	0.56	0.59	0.61	0.63	0.66	0.69	0.72	0.74	0.77	0.80	0.83
0.013	0.96	0.97	0.97	0.97	0.96	0.96	0.95	0.94	0.94	0.93	0.90	0.88	0.84	0.79	0.80
.026	.87	.87	.85	.85	.84	.84	.84	.83	.83	.82	.80	.78	.74	.71	.70
.050	.71	.72	.70	.69	.68	.69	.68	.68	.69	.68	.66	.64	.61	.58	.58
.074	.64	.64	.63	.63	.62	.64	.62	.62	.63	.62	.60	.59	.56	.54	.54
.101	.58	.58	.56	.57	.56	.56	.56	.56	.57	.56	.54	.53	.52	.49	.49
.151	.50	.50	.48	.48	.47	.48	.48	.48	.49	.48	.47	.46	.44	.42	.42
.200	.43	.44	.42	.43	.42	.43	.42	.42	.43	.43	.41	.40	.39	.37	.38
.252	.40	.39	.38	.38	.37	.38	.38	.38	.38	.38	.38	.36	.34	.32	.34
.302	.36	.36	.34	.34	.33	.34	.34	.34	.35	.35	.34	.32	.31	.29	.30
.352	.32	.32	.31	.31	.30	.31	.30	.31	.31	.31	.30	.29	.27	.26	.26
.400	.31	.30	.28	.28	.26	.28	.28	.28	.29	.28	.28	.26	.25	.24	.24
.451	.29	.28	.28	.27	.26	.27	.27	.27	.28	.28	.27	.25	.24	.22	.23
.501	.27	.27	.26	.26	.24	.26	.26	.25	.26	.26	.26	.24	.22	.21	.22
.551	.24	.24	.24	.24	.24	.24	.23	.24	.25	.25	.24	.23	.21	.19	.20
.601	.24	.24	.23	.24	.24	.24	.23	.24	.25	.25	.24	.22	.21	.19	.20
.652	.24	.24	.23	.23	.23	.24	.23	.24	.25	.24	.24	.22	.20	.19	.20
.702	.24	.24	.23	.23	.23	.23	.23	.23	.25	.24	.24	.22	.20	.19	.20
.752	.24	.24	.23	.23	.23	.23	.23	.24	.25	.24	.24	.22	.21	.19	.21
.801	.24	.23	.22	.23	.23	.23	.22	.23	.24	.23	.23	.21	.19	.18	.20
.851	.21	.20	.19	.19	.19	.19	.18	.18	.20	.19	.19	.16	.14	.15	.14
.902	.19	.17	.15	.15	.15	.15	.14	.13	.14	.14	.13	.10	.08	.06	.08
.951	.11	.05	.01	0	-.01	-.01	-.01	-.04	-.02	-.03	-.04	-.08	-.12	-.17	----

NACA

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(j) $\alpha_o = 10^\circ$

Upper surface														
x/c \ M	0.31	0.41	0.51	0.54	0.56	0.59	0.61	0.64	0.67	0.70	0.72	0.74	0.78	0.80
0	-1.54	-1.20	-0.76	-0.66	-0.53	-0.40	-0.28	-0.10	0.02	0.18	0.29	0.41	0.55	0.64
.006	-1.68	-1.44	-1.43	-1.44	-1.43	-1.49	-1.53	-1.47	-1.49	-1.51	-1.51	-1.56	-1.52	-1.43
.013	-1.55	-1.37	-1.28	-1.26	-1.23	-1.29	-1.36	-1.32	-1.36	-1.41	-1.42	-1.54	-1.57	-1.49
.025	-1.49	-1.34	-1.25	-1.23	-1.20	-1.25	-1.33	-1.29	-1.33	-1.39	-1.44	-1.57	-1.61	-1.56
.050	-1.52	-1.36	-1.27	-1.25	-1.21	-1.26	-1.32	-1.27	-1.29	-1.34	-1.36	-1.47	-1.50	-1.45
.075	-1.55	-1.39	-1.29	-1.28	-1.23	-1.27	-1.33	-1.25	-1.24	-1.31	-1.31	-1.40	-1.45	-1.41
.100	-1.56	-1.41	-1.32	-1.29	-1.25	-1.28	-1.32	-1.24	-1.22	-1.23	-1.24	-1.43	-1.44	-1.42
.150	-1.51	-1.39	-1.30	-1.29	-1.23	-1.24	-1.26	-1.17	-1.13	-1.12	-1.07	-1.23	-1.39	-1.42
.200	-1.36	-1.30	-1.23	-1.22	-1.18	-1.16	-1.18	-1.10	-1.04	-.98	-.94	-1.04	-1.27	-1.40
.250	-1.17	-1.16	-1.12	-1.12	-1.09	-1.05	-1.07	-.99	-.95	-.83	-.84	-.93	-1.10	-1.38
.298	-1.00	-1.01	-1.02	-1.01	-1.00	-.96	-.97	-.91	-.89	-.74	-.75	-.87	-.98	-1.33
.352	-.85	-.87	-.90	-.90	-.91	-.87	-.88	-.83	-.83	-.69	-.67	-.77	-.88	-1.24
.400	-.74	-.76	-.81	-.80	-.82	-.80	-.80	-.77	-.78	-.68	-.67	-.72	-.79	-1.10
.450	-.64	-.68	-.74	-.74	-.76	-.74	-.77	-.75	-.77	-.75	-.73	-.79	-.79	-.97
.500	-.57	-.58	-.66	-.66	-.69	-.65	-.69	-.68	-.71	-.67	-.67	-.69	-.71	-.86
.551	-.51	-.51	-.60	-.59	-.63	-.60	-.63	-.64	-.67	-.66	-.66	-.69	-.68	-.80
.600	-.46	-.46	-.55	-.53	-.58	-.55	-.59	-.60	-.64	-.65	-.65	-.69	-.66	-.77
.651	-.40	-.40	-.49	-.49	-.53	-.51	-.55	-.56	-.61	-.65	-.65	-.69	-.65	-.74
.701	-.36	-.36	-.46	-.46	-.48	-.47	-.51	-.53	-.58	-.64	-.65	-.69	-.65	-.71
.752	-.32	-.32	-.41	-.41	-.45	-.44	-.48	-.50	-.56	-.63	-.65	-.70	-.64	-.69
.802	-.28	-.29	-.39	-.39	-.42	-.41	-.45	-.47	-.54	-.62	-.65	-.70	-.64	-.67
.852	-.26	-.26	-.35	-.35	-.39	-.38	-.42	-.44	-.51	-.59	-.64	-.70	-.62	-.65
.902	-.22	-.23	-.32	-.32	-.35	-.35	-.39	-.40	-.47	-.57	-.62	-.69	-.61	-.62
.947	-.20	-.21	-.30	-.30	-.33	-.33	-.37	-.38	-.45	-.55	-.60	-.68	-.59	-.60
1.000	-.17	-.18	-.26	-.27	-.30	-.29	-.32	-.34	-.40	-.50	-.55	-.64	-.55	-.56
Lower surface														
x/c \ M	0.31	0.41	0.51	0.54	0.56	0.59	0.61	0.64	0.67	0.70	0.72	0.74	0.78	0.80
0.013	0.96	0.99	0.98	0.98	0.98	0.99	0.97	0.97	0.95	0.94	0.93	0.91	0.92	0.90
.026	.89	.91	.87	.87	.87	.87	.86	.86	.84	.83	.83	.81	.82	.80
.050	.74	.75	.73	.73	.72	.73	.71	.71	.71	.69	.69	.67	.69	.67
.075	.67	.69	.66	.66	.65	.67	.65	.65	.64	.64	.64	.62	.63	.62
.101	.60	.63	.59	.60	.59	.60	.59	.59	.58	.58	.57	.56	.58	.57
.151	.53	.54	.51	.51	.51	.52	.51	.51	.50	.50	.50	.47	.50	.49
.200	.46	.48	.45	.45	.44	.46	.45	.45	.44	.44	.44	.42	.45	.43
.252	.42	.43	.40	.40	.40	.41	.40	.40	.39	.39	.40	.37	.40	.38
.302	.37	.39	.36	.36	.36	.37	.35	.36	.35	.35	.35	.33	.36	.34
.352	.33	.35	.32	.32	.32	.33	.32	.32	.31	.31	.31	.29	.32	.30
.400	.31	.32	.30	.29	.29	.30	.29	.29	.28	.28	.29	.26	.30	.27
.451	.30	.30	.27	.28	.27	.28	.27	.28	.27	.27	.27	.24	.27	.25
.501	.28	.28	.26	.26	.25	.27	.25	.26	.24	.25	.25	.22	.25	.24
.551	.25	.24	.23	.23	.23	.23	.22	.23	.23	.23	.22	.20	.23	.22
.601	.24	.23	.22	.22	.22	.22	.21	.22	.22	.22	.21	.19	.23	.21
.652	.23	.22	.21	.21	.21	.21	.20	.22	.21	.21	.20	.18	.22	.21
.702	.23	.22	.20	.21	.21	.21	.20	.21	.20	.21	.19	.17	.21	.20
.752	.22	.21	.20	.20	.20	.20	.19	.20	.20	.20	.19	.17	.21	.20
.801	.22	.20	.19	.19	.19	.19	.18	.19	.18	.19	.17	.15	.19	.19
.851	.18	.16	.14	.14	.14	.14	.12	.14	.12	.12	.11	.09	.13	.13
.902	.15	.12	.08	.08	.08	.08	.06	.07	.06	.05	.03	.01	.06	.05
.951	.04	-.04	-.09	-.10	-.11	-.11	-.14	-.13	-.15	-.17	-.21	-.23	-.16	----

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(k) $\alpha_o = 12^o$

Upper surface													
x/c \ M	0.31	0.41	0.51	0.54	0.57	0.59	0.62	0.64	0.67	0.70	0.73	0.76	0.79
0	-1.09	-1.06	-0.67	-0.56	-0.38	-0.29	-0.21	-0.12	-0.07	0.02	0.12	0.24	0.38
.006	-1.16	-1.21	-1.04	-.99	-.89	-.90	-.93	-1.07	-1.26	-1.41	-1.59	-1.79	-1.64
.013	-1.11	-1.17	-.99	-.93	-.83	-.83	-.83	-.91	-1.17	-1.34	-1.52	-1.79	-1.70
.025	-1.09	-1.15	-.98	-.91	-.80	-.79	-.79	-.84	-1.13	-1.32	-1.52	-1.75	-1.72
.050	-1.09	-1.17	-.98	-.92	-.80	-.80	-.80	-.84	-1.11	-1.27	-1.46	-1.68	-1.59
.075	-1.10	-1.18	-.99	-.91	-.81	-.80	-.79	-.85	-1.09	-1.24	-1.37	-1.61	-1.54
.100	-1.11	-1.19	-1.01	-.94	-.83	-.81	-.81	-.84	-1.09	-1.22	-1.33	-1.48	-1.50
.150	-1.10	-1.15	-1.01	-.93	-.83	-.82	-.81	-.85	-1.04	-1.14	-1.20	-1.26	-1.36
.200	-1.08	-1.08	-.98	-.92	-.83	-.83	-.80	-.85	-.98	-1.02	-1.10	-1.12	-1.03
.250	-1.03	-1.00	-.93	-.91	-.81	-.82	-.80	-.81	-.88	-.86	-.90	-1.12	-1.02
.298	-.96	-.93	-.88	-.87	-.80	-.81	-.79	-.80	-.80	-.76	-.77	-.85	-.99
.352	-.90	-.85	-.83	-.83	-.78	-.80	-.78	-.78	-.75	-.71	-.69	-.64	-.75
.400	-.84	-.80	-.79	-.80	-.76	-.78	-.77	-.76	-.73	-.69	-.67	-.63	-.67
.450	-.79	-.75	-.76	-.78	-.76	-.78	-.78	-.77	-.80	-.79	-.77	-.72	-.75
.500	-.75	-.70	-.73	-.76	-.74	-.75	-.75	-.75	-.72	-.69	-.67	-.63	-.65
.551	-.70	-.66	-.70	-.73	-.72	-.73	-.73	-.73	-.71	-.68	-.67	-.62	-.64
.600	-.65	-.62	-.68	-.71	-.71	-.72	-.72	-.73	-.71	-.68	-.67	-.63	-.65
.651	-.62	-.58	-.65	-.68	-.69	-.70	-.70	-.71	-.70	-.68	-.68	-.64	-.66
.701	-.58	-.55	-.62	-.65	-.68	-.69	-.69	-.70	-.69	-.68	-.68	-.65	-.67
.752	-.54	-.52	-.61	-.63	-.66	-.67	-.67	-.69	-.69	-.68	-.69	-.66	-.67
.802	-.49	-.49	-.59	-.61	-.63	-.65	-.65	-.68	-.68	-.68	-.70	-.67	-.68
.852	-.46	-.45	-.54	-.56	-.59	-.61	-.61	-.64	-.66	-.67	-.70	-.68	-.70
.902	-.42	-.41	-.51	-.53	-.56	-.57	-.57	-.62	-.65	-.66	-.70	-.70	-.71
.947	-.39	-.39	-.48	-.50	-.52	-.54	-.54	-.58	-.62	-.65	-.71	-.71	-.72
1.000	-.34	-.34	-.42	-.43	-.46	-.48	-.48	-.52	-.57	-.62	-.68	-.70	-.71
Lower surface													
x/c \ M	0.31	0.41	0.51	0.54	0.57	0.59	0.62	0.64	0.67	0.70	0.73	0.76	0.79
0.013	0.97	1.00	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.98
.026	.89	.92	.89	.89	.88	.88	.89	.89	.89	.89	.89	.89	.89
.050	.76	.78	.75	.74	.74	.74	.74	.75	.74	.74	.75	.75	.75
.075	.68	.71	.68	.68	.67	.67	.69	.68	.68	.69	.69	.69	.69
.101	.61	.64	.61	.61	.61	.61	.61	.62	.61	.62	.62	.63	.63
.151	.54	.55	.52	.53	.53	.52	.53	.53	.53	.54	.54	.55	.55
.200	.45	.48	.46	.47	.46	.46	.46	.47	.47	.47	.48	.49	.49
.252	.42	.43	.40	.41	.40	.40	.41	.41	.41	.42	.42	.43	.43
.302	.37	.39	.36	.37	.36	.36	.37	.37	.37	.38	.37	.39	.39
.352	.34	.34	.32	.32	.31	.31	.32	.32	.32	.33	.33	.34	.35
.400	.30	.31	.29	.29	.29	.28	.29	.29	.29	.30	.30	.31	.31
.451	.29	.29	.27	.27	.27	.26	.27	.27	.27	.28	.28	.29	.29
.501	.26	.27	.24	.25	.24	.24	.24	.25	.25	.26	.26	.27	.27
.551	.23	.23	.22	.22	.22	.21	.21	.21	.23	.23	.23	.24	.24
.601	.21	.21	.21	.20	.21	.20	.20	.20	.21	.22	.22	.23	.23
.652	.21	.20	.20	.19	.20	.19	.19	.19	.20	.21	.21	.22	.22
.702	.20	.19	.18	.18	.18	.17	.18	.18	.19	.20	.20	.21	.21
.752	.19	.18	.17	.17	.17	.17	.17	.17	.18	.19	.19	.20	.21
.801	.19	.16	.15	.15	.15	.14	.15	.15	.16	.17	.17	.18	.19
.851	.15	.11	.10	.09	.09	.08	.08	.08	.09	.10	.10	.12	.13
.902	.12	.05	.03	.02	.02	.01	.01	0	.01	.02	.02	.04	.05
.951	.02	-.13	-.18	-.19	-.20	-.22	-.22	-.23	-.23	-.23	-.24	-.21	----

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(l) $\alpha_0 = 14^\circ$

Upper surface												
x/c \ M	0.31	0.41	0.51	0.54	0.57	0.59	0.61	0.65	0.67	0.70	0.73	0.77
0	-1.17	-1.18	-0.86	-0.59	-0.52	-0.43	-0.22	-0.14	-0.10	-0.07	-0.01	0.10
.006	-1.18	-1.29	-1.20	-.94	-.95	-.89	-.71	-.73	-.75	-.99	-1.17	-1.05
.013	-1.13	-1.24	-1.15	-.90	-.91	-.83	-.66	-.67	-.69	-.87	-1.03	-1.03
.025	-1.09	-1.23	-1.15	-.87	-.87	-.80	-.63	-.63	-.65	-.75	-.93	-1.03
.050	-1.10	-1.23	-1.15	-.88	-.88	-.80	-.63	-.63	-.64	-.75	-.92	-1.00
.075	-1.06	-1.22	-1.19	-.89	-.91	-.79	-.62	-.62	-.64	-.75	-.90	-1.00
.100	-1.07	-1.23	-1.17	-.87	-.89	-.80	-.63	-.63	-.65	-.75	-.88	-.95
.150	-.90	-.97	-.99	-.81	-.90	-.79	-.63	-.63	-.65	-.75	-.87	-.93
.200	-.82	-.82	-.70	-.71	-.87	-.78	-.64	-.64	-.66	-.76	-.82	-.92
.250	-.81	-.80	-.68	-.69	-.83	-.77	-.65	-.65	-.67	-.76	-.78	-.72
.298	-.82	-.80	-.69	-.70	-.79	-.74	-.67	-.66	-.67	-.75	-.68	-.66
.352	-.81	-.79	-.68	-.69	-.75	-.72	-.68	-.67	-.68	-.75	-.68	-.66
.400	-.80	-.77	-.69	-.69	-.72	-.70	-.69	-.67	-.69	-.75	-.69	-.66
.450	-.80	-.77	-.69	-.69	-.70	-.69	-.70	-.69	-.70	-.75	-.69	-.67
.500	-.79	-.77	-.70	-.70	-.71	-.71	-.71	-.70	-.71	-.76	-.70	-.68
.551	-.77	-.76	-.71	-.71	-.71	-.71	-.72	-.71	-.71	-.77	-.71	-.69
.600	-.77	-.76	-.72	-.71	-.72	-.72	-.73	-.72	-.72	-.78	-.71	-.69
.651	-.75	-.75	-.72	-.71	-.72	-.73	-.74	-.73	-.73	-.78	-.72	-.70
.701	-.74	-.74	-.73	-.72	-.72	-.73	-.75	-.73	-.74	-.79	-.73	-.71
.752	-.73	-.74	-.73	-.71	-.72	-.73	-.75	-.73	-.75	-.78	-.74	-.71
.802	-.70	-.72	-.73	-.70	-.72	-.72	-.74	-.73	-.74	-.78	-.74	-.73
.852	-.67	-.69	-.70	-.68	-.68	-.69	-.72	-.70	-.72	-.77	-.74	-.74
.902	-.63	-.66	-.67	-.65	-.65	-.66	-.69	-.68	-.70	-.75	-.74	-.74
.947	-.61	-.63	-.65	-.62	-.62	-.63	-.65	-.64	-.67	-.73	-.72	-.74
1.000	-.53	-.56	-.59	-.55	-.55	-.57	-.58	-.59	-.62	-.68	-.69	-.72
Lower surface												
x/c \ M	0.31	0.41	0.51	0.54	0.57	0.59	0.61	0.65	0.67	0.70	0.73	0.77
0.013	0.98	1.02	1.02	1.02	1.01	1.02	1.01	1.01	1.01	1.02	1.02	1.04
.026	.91	.93	.93	.92	.91	.93	.91	.92	.91	.91	.92	.94
.050	.77	.78	.79	.79	.77	.78	.77	.78	.77	.78	.79	.80
.075	.71	.71	.72	.71	.71	.72	.71	.72	.71	.71	.72	.75
.101	.63	.64	.65	.65	.64	.65	.64	.65	.65	.65	.66	.68
.151	.54	.55	.56	.56	.55	.56	.55	.54	.56	.56	.57	.59
.200	.48	.48	.49	.50	.48	.49	.48	.49	.49	.49	.51	.53
.252	.43	.41	.44	.43	.42	.43	.43	.44	.44	.43	.45	.47
.302	.37	.37	.39	.39	.37	.38	.38	.39	.39	.39	.40	.43
.352	.32	.32	.34	.34	.33	.33	.33	.34	.34	.34	.35	.38
.400	.29	.29	.30	.31	.29	.30	.29	.30	.30	.30	.32	.34
.451	.27	.26	.28	.22	.27	.27	.27	.28	.28	.27	.29	.32
.501	.25	.24	.26	.25	.24	.25	.24	.25	.25	.25	.27	.29
.551	.20	.20	.21	.22	.22	.21	.22	.22	.23	.24	.25	.27
.601	.19	.19	.20	.20	.20	.19	.20	.21	.21	.22	.23	.25
.652	.16	.17	.18	.18	.18	.18	.18	.19	.19	.20	.21	.24
.702	.15	.15	.16	.16	.17	.16	.16	.17	.17	.18	.20	.22
.752	.13	.14	.15	.15	.15	.15	.14	.16	.16	.17	.19	.21
.801	.12	.12	.13	.13	.14	.13	.13	.14	.14	.15	.17	.20
.851	.05	.05	.06	.06	.06	.06	.05	.06	.07	.08	.09	.12
.902	-.03	-.04	-.03	-.03	-.03	-.03	-.04	-.03	-.03	-.02	0	.03
.951	-.24	-.28	-.29	-.29	-.28	-.29	-.30	-.30	-.29	-.28	-.27	----

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(m) $\alpha_o = 16^o$

Upper surface											
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.59	0.62	0.65	0.67	0.70	0.73
0	-0.83	-0.66	-0.47	-0.43	-0.40	-0.39	-0.32	-0.27	-0.22	-0.19	-0.11
.006	-.80	-.72	-.62	-.60	-.61	-.66	-.60	-.61	-.61	-.66	-.66
.013	-.79	-.72	-.61	-.59	-.60	-.64	-.59	-.60	-.61	-.65	-.66
.025	-.82	-.72	-.60	-.58	-.59	-.64	-.58	-.60	-.61	-.65	-.66
.051	-.76	-.66	-.60	-.58	-.59	-.64	-.58	-.60	-.60	-.65	-.66
.075	-.66	-.60	-.60	-.58	-.59	-.62	-.58	-.60	-.60	-.65	-.66
.101	-.63	-.59	-.60	-.59	-.59	-.62	-.59	-.60	-.61	-.65	-.66
.150	-.63	-.59	-.61	-.60	-.60	-.62	-.59	-.61	-.61	-.66	-.66
.200	-.63	-.60	-.62	-.61	-.62	-.63	-.60	-.62	-.62	-.66	-.67
.251	-.64	-.61	-.62	-.62	-.62	-.64	-.61	-.62	-.63	-.67	-.68
.298	-.65	-.62	-.64	-.63	-.64	-.65	-.62	-.62	-.63	-.68	-.68
.352	-.66	-.62	-.65	-.64	-.65	-.66	-.63	-.64	-.64	-.69	-.69
.400	-.68	-.64	-.67	-.65	-.66	-.67	-.64	-.65	-.65	-.70	-.70
.450	-.70	-.67	-.69	-.68	-.68	-.69	-.66	-.67	-.67	-.71	-.72
.500	-.71	-.67	-.70	-.68	-.69	-.70	-.67	-.68	-.68	-.72	-.72
.551	-.73	-.68	-.71	-.69	-.70	-.71	-.68	-.68	-.68	-.73	-.73
.600	-.74	-.69	-.72	-.70	-.72	-.72	-.69	-.70	-.69	-.74	-.74
.651	-.75	-.70	-.73	-.71	-.72	-.72	-.70	-.70	-.71	-.74	-.75
.701	-.76	-.70	-.74	-.72	-.73	-.74	-.71	-.72	-.72	-.76	-.76
.752	-.76	-.71	-.74	-.72	-.74	-.74	-.72	-.72	-.73	-.76	-.77
.802	-.75	-.71	-.74	-.71	-.73	-.74	-.72	-.72	-.73	-.76	-.77
.852	-.74	-.68	-.71	-.69	-.71	-.72	-.70	-.71	-.72	-.76	-.77
.902	-.71	-.66	-.68	-.67	-.68	-.70	-.68	-.69	-.70	-.74	-.75
.947	-.69	-.63	-.66	-.62	-.66	-.68	-.66	-.67	-.68	-.73	-.74
1.000	-.64	-.58	-.60	-.58	-.61	-.63	-.61	-.64	-.65	-.70	-.71
Lower surface											
x/c \ M	0.31	0.42	0.52	0.54	0.57	0.59	0.62	0.65	0.67	0.70	0.73
0.013	0.96	1.01	1.01	1.02	1.03	1.04	1.04	1.04	1.05	1.05	1.06
.026	.91	.94	.92	.94	.94	.94	.95	.94	.96	.96	.96
.050	.79	.80	.79	.80	.80	.80	.82	.82	.83	.82	.82
.074	.71	.73	.72	.74	.74	.74	.76	.76	.76	.76	.77
.101	.64	.67	.66	.67	.67	.68	.69	.68	.70	.69	.70
.151	.55	.58	.56	.58	.58	.58	.60	.60	.61	.60	.61
.200	.49	.50	.49	.51	.51	.51	.53	.53	.54	.53	.55
.252	.43	.44	.42	.44	.44	.45	.46	.46	.48	.47	.48
.302	.38	.40	.38	.40	.40	.40	.42	.42	.43	.42	.42
.352	.33	.34	.34	.34	.35	.35	.36	.36	.37	.37	.38
.400	.30	.31	.30	.31	.31	.31	.33	.33	.34	.33	.35
.451	.28	.28	.26	.28	.28	.28	.30	.30	.31	.30	.32
.501	.23	.25	.24	.25	.25	.25	.27	.27	.28	.27	.29
.551	.20	.20	.21	.22	.21	.22	.23	.23	.24	.25	.25
.601	.18	.18	.19	.20	.19	.20	.21	.21	.22	.23	.23
.652	.16	.16	.17	.17	.17	.18	.19	.19	.19	.21	.21
.702	.14	.14	.15	.15	.15	.15	.17	.17	.17	.19	.19
.752	.12	.12	.13	.13	.13	.14	.15	.15	.16	.17	.18
.801	.10	.10	.11	.11	.11	.11	.13	.15	.14	.15	.16
.851	.02	.02	.03	.03	.03	.04	.05	.05	.15	.07	.08
.902	-.07	-.07	-.07	-.07	-.06	-.06	-.05	-.05	-.04	-.03	-.02
.951	-.29	-.32	-.33	-.33	-.33	-.33	-.32	-.32	-.31	-.30	-.29

NACA

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(n) $\alpha_o = 18^\circ$

Upper surface									
x/c \ M	0.31	0.41	0.52	0.54	0.57	0.60	0.62	0.65	0.68
0	-0.63	-0.76	-0.62	-0.61	-0.56	-0.53	-0.57	-0.50	-0.45
.006	-.58	-.73	-.69	-.68	-.66	-.66	-.70	-.72	-.74
.013	-.58	-.74	-.69	-.68	-.66	-.66	-.71	-.72	-.74
.025	-.57	-.74	-.69	-.68	-.66	-.65	-.71	-.72	-.73
.051	-.56	-.67	-.66	-.68	-.66	-.66	-.71	-.71	-.74
.075	-.55	-.63	-.63	-.66	-.64	-.64	-.68	-.69	-.72
.101	-.57	-.62	-.62	-.66	-.65	-.64	-.68	-.68	-.72
.150	-.58	-.62	-.62	-.66	-.65	-.64	-.68	-.69	-.72
.200	-.58	-.62	-.63	-.66	-.65	-.64	-.68	-.69	-.72
.251	-.59	-.64	-.64	-.67	-.66	-.66	-.68	-.70	-.72
.298	-.60	-.64	-.65	-.68	-.66	-.66	-.69	-.70	-.73
.352	-.60	-.65	-.66	-.69	-.68	-.66	-.70	-.71	-.73
.400	-.61	-.66	-.67	-.70	-.68	-.67	-.70	-.71	-.74
.450	-.63	-.68	-.68	-.71	-.70	-.69	-.72	-.72	-.76
.500	-.63	-.68	-.68	-.71	-.70	-.69	-.72	-.72	-.75
.551	-.63	-.69	-.69	-.71	-.70	-.69	-.72	-.74	-.76
.600	-.64	-.70	-.70	-.72	-.70	-.70	-.73	-.74	-.76
.651	-.64	-.70	-.70	-.72	-.71	-.70	-.74	-.74	-.77
.701	-.65	-.71	-.71	-.73	-.72	-.70	-.74	-.74	-.77
.752	-.65	-.71	-.71	-.74	-.72	-.71	-.75	-.74	-.78
.802	-.65	-.71	-.70	-.74	-.72	-.70	-.75	-.74	-.77
.852	-.63	-.70	-.69	-.73	-.72	-.70	-.74	-.74	-.77
.902	-.61	-.68	-.68	-.72	-.70	-.68	-.73	-.72	-.76
.947	-.60	-.67	-.66	-.70	-.69	-.67	-.72	-.71	-.74
1.000	-.55	-.64	-.63	-.66	-.65	-.64	-.69	-.69	-.72

Lower surface									
x/c \ M	0.31	0.41	0.52	0.54	0.57	0.60	0.62	0.65	0.68
0.013	0.99	1.01	1.03	1.04	1.04	1.06	1.05	1.08	1.07
.026	.93	.94	.96	.96	.96	.97	.98	.99	.99
.050	.82	.81	.82	.82	.84	.84	.85	.86	.86
.074	.75	.74	.76	.76	.77	.78	.78	.80	.80
.101	.67	.68	.69	.65	.71	.71	.72	.74	.74
.151	.58	.58	.59	.60	.61	.62	.62	.64	.64
.200	.52	.50	.52	.52	.54	.55	.55	.57	.57
.252	.45	.44	.46	.46	.48	.48	.49	.50	.50
.302	.40	.40	.40	.41	.42	.43	.43	.46	.45
.352	.35	.34	.35	.36	.36	.38	.38	.40	.39
.400	.32	.30	.31	.32	.33	.34	.34	.36	.36
.451	.29	.27	.28	.29	.30	.30	.30	.32	.32
.501	.25	.24	.25	.26	.26	.27	.27	.29	.29
.551	.20	.20	.21	.22	.24	.22	.24	.25	.26
.601	.18	.17	.19	.20	.20	.21	.22	.23	.24
.652	.16	.15	.17	.17	.18	.18	.20	.19	.22
.702	.14	.12	.14	.15	.16	.16	.17	.18	.19
.752	.12	.10	.12	.13	.13	.14	.15	.16	.17
.801	.09	.08	.10	.10	.11	.12	.12	.14	.15
.851	.02	0	.05	.02	.03	.04	.04	.05	.07
.902	-.06	-.10	-.09	-.08	-.07	-.06	-.06	-.05	-.04
.951	-.28	-.36	-.36	-.36	-.35	-.33	-.34	-.33	-.31

(o) $\alpha_o = 20^\circ$

Upper surface							
x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.63
0	-0.77	-0.77	-0.73	-0.76	-0.87	-0.82	-0.75
.006	-.62	-.63	-.65	-.69	-.77	-.75	-.75
.013	-.61	-.63	-.65	-.69	-.77	-.75	-.74
.025	-.62	-.63	-.65	-.69	-.77	-.75	-.74
.050	-.62	-.63	-.65	-.68	-.77	-.74	-.74
.075	-.62	-.63	-.65	-.68	-.77	-.74	-.74
.100	-.61	-.63	-.65	-.68	-.77	-.75	-.74
.150	-.62	-.63	-.66	-.69	-.77	-.75	-.74
.200	-.62	-.63	-.66	-.69	-.78	-.75	-.74
.250	-.63	-.64	-.67	-.70	-.78	-.76	-.75
.298	-.63	-.65	-.67	-.70	-.79	-.76	-.75
.352	-.64	-.65	-.68	-.71	-.79	-.77	-.76
.400	-.64	-.66	-.69	-.71	-.80	-.77	-.77
.450	-.66	-.67	-.70	-.73	-.82	-.78	-.77
.500	-.67	-.67	-.70	-.73	-.81	-.78	-.77
.551	-.68	-.68	-.70	-.73	-.82	-.79	-.78
.600	-.68	-.68	-.70	-.74	-.83	-.79	-.79
.651	-.68	-.68	-.71	-.74	-.83	-.80	-.79
.701	-.69	-.69	-.72	-.74	-.84	-.80	-.79
.752	-.69	-.69	-.72	-.75	-.85	-.81	-.80
.802	-.69	-.70	-.72	-.75	-.85	-.81	-.80
.852	-.68	-.68	-.71	-.74	-.84	-.80	-.79
.902	-.66	-.67	-.70	-.73	-.83	-.79	-.78
.947	-.65	-.66	-.69	-.71	-.81	-.77	-.77
1.000	-.61	-.62	-.65	-.68	-.77	-.74	-.74

Lower surface							
x/c \ M	0.32	0.42	0.52	0.54	0.57	0.60	0.63
0.013	1.01	1.02	1.05	1.05	1.07	1.07	1.08
.026	.94	.97	1.00	.99	1.01	1.02	1.02
.050	.84	.85	.87	.87	.89	.90	.90
.075	.78	.79	.81	.80	.83	.84	.83
.101	.70	.72	.74	.74	.76	.77	.76
.151	.61	.63	.64	.64	.67	.67	.67
.200	.54	.55	.57	.57	.59	.60	.60
.252	.48	.49	.50	.50	.52	.53	.53
.302	.42	.44	.45	.45	.47	.48	.47
.352	.36	.38	.39	.39	.41	.42	.42
.400	.33	.34	.35	.35	.36	.37	.37
.451	.29	.31	.31	.31	.33	.35	.34
.501	.25	.27	.27	.27	.29	.31	.31
.551	.20	.23	.24	.25	.26	.27	.27
.601	.18	.20	.21	.22	.24	.24	.24
.652	.15	.17	.19	.19	.20	.21	.22
.702	.13	.14	.16	.16	.18	.19	.19
.752	.10	.12	.14	.14	.15	.16	.17
.801	.08	.09	.11	.11	.12	.13	.14
.851	0	.01	.03	.03	.04	.05	.06
.902	-.09	-.09	-.08	-.08	-.08	-.07	-.06
.951	-.31	-.35	-.35	-.37	-.37	-.35	-.34

TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Continued

(p) $\alpha_o = 22^\circ$

Upper surface

x/c \ M	0.31	0.41	0.52	0.55	0.57	0.60
0	-0.86	-0.88	-0.87	-0.89	-0.92	-0.96
.006	-.64	-.71	-.69	-.70	-.73	-.79
.013	-.63	-.71	-.69	-.70	-.73	-.79
.025	-.63	-.71	-.69	-.70	-.73	-.78
.050	-.63	-.71	-.69	-.70	-.72	-.78
.075	-.63	-.70	-.69	-.70	-.73	-.79
.100	-.64	-.71	-.69	-.70	-.73	-.79
.150	-.63	-.71	-.69	-.71	-.73	-.79
.200	-.64	-.71	-.69	-.71	-.73	-.79
.250	-.64	-.72	-.70	-.71	-.74	-.80
.298	-.65	-.72	-.71	-.72	-.74	-.80
.352	-.66	-.73	-.71	-.73	-.75	-.80
.400	-.66	-.73	-.72	-.73	-.75	-.81
.450	-.68	-.75	-.73	-.74	-.77	-.82
.500	-.68	-.75	-.73	-.75	-.77	-.83
.551	-.69	-.76	-.74	-.75	-.77	-.83
.600	-.69	-.76	-.75	-.75	-.78	-.84
.651	-.69	-.76	-.75	-.75	-.78	-.84
.701	-.70	-.77	-.76	-.76	-.79	-.84
.752	-.70	-.78	-.75	-.76	-.79	-.85
.802	-.70	-.77	-.75	-.77	-.79	-.85
.852	-.70	-.77	-.74	-.75	-.79	-.84
.902	-.68	-.75	-.73	-.75	-.77	-.82
.947	-.67	-.74	-.72	-.73	-.77	-.81
1.000	-.65	-.70	-.69	-.71	-.74	-.78

Lower surface

x/c \ M	0.31	0.41	0.52	0.55	0.57	0.60
0.013	1.04	1.04	1.07	1.06	1.06	1.08
.026	.95	.99	1.02	1.03	1.02	1.05
.050	.87	.90	.93	.92	.92	.95
.075	.83	.84	.86	.86	.86	.89
.101	.75	.77	.79	.80	.79	.82
.151	.66	.68	.70	.70	.70	.72
.200	.58	.60	.62	.62	.62	.65
.252	.52	.54	.56	.55	.55	.57
.302	.46	.47	.50	.50	.49	.52
.352	.40	.41	.44	.44	.44	.46
.400	.36	.37	.40	.40	.39	.42
.451	.33	.34	.36	.36	.35	.38
.501	.28	.29	.32	.32	.31	.34
.551	.24	.26	.27	.28	.28	.30
.601	.20	.23	.25	.25	.25	.27
.652	.17	.20	.21	.22	.22	.23
.702	.15	.17	.19	.19	.19	.20
.752	.12	.14	.16	.16	.16	.17
.801	.09	.10	.13	.13	.13	.14
.851	0	.02	.04	.04	.04	.06
.902	-.10	-.09	-.08	-.07	-.07	-.06
.951	-.34	-.36	-.36	-.35	-.36	-.35

(q) $\alpha_o = 24^\circ$

Upper surface

x/c \ M	0.32	0.42	0.52	0.55	0.58	0.60
0	-0.76	-0.75	-0.84	-0.84	-0.84	-0.87
.006	-.71	-.70	-.77	-.78	-.78	-.79
.013	-.70	-.70	-.77	-.78	-.77	-.79
.025	-.69	-.69	-.77	-.77	-.77	-.78
.050	-.70	-.69	-.77	-.77	-.77	-.78
.075	-.70	-.69	-.77	-.77	-.77	-.79
.100	-.70	-.69	-.77	-.78	-.77	-.79
.150	-.70	-.69	-.78	-.78	-.78	-.79
.200	-.71	-.70	-.78	-.78	-.78	-.79
.250	-.71	-.70	-.79	-.79	-.79	-.80
.298	-.71	-.71	-.79	-.79	-.79	-.80
.352	-.72	-.72	-.80	-.79	-.79	-.80
.400	-.72	-.72	-.80	-.80	-.79	-.81
.450	-.73	-.73	-.81	-.81	-.80	-.82
.500	-.74	-.73	-.81	-.82	-.81	-.82
.551	-.74	-.73	-.82	-.82	-.81	-.83
.600	-.75	-.74	-.82	-.83	-.82	-.83
.651	-.75	-.74	-.83	-.83	-.82	-.83
.701	-.76	-.75	-.83	-.83	-.83	-.84
.752	-.76	-.75	-.83	-.84	-.82	-.84
.802	-.75	-.75	-.83	-.84	-.82	-.84
.852	-.75	-.74	-.82	-.83	-.81	-.83
.902	-.74	-.73	-.81	-.82	-.80	-.82
.947	-.72	-.72	-.80	-.81	-.79	-.81
1.000	-.69	-.69	-.77	-.78	-.76	-.79

Lower surface

x/c \ M	0.32	0.42	0.52	0.55	0.58	0.60
0.013	1.03	1.05	1.06	1.07	1.08	1.09
.026	.97	1.00	1.02	1.04	1.04	1.06
.050	.92	.95	.97	.98	.98	.99
.075	.86	.89	.91	.91	.92	.93
.101	.80	.82	.85	.85	.85	.87
.151	.70	.73	.75	.76	.76	.77
.200	.63	.65	.68	.69	.69	.69
.252	.55	.58	.61	.61	.62	.63
.302	.51	.52	.55	.56	.56	.57
.352	.45	.46	.49	.50	.50	.50
.400	.39	.42	.45	.45	.45	.46
.451	.36	.38	.40	.42	.41	.42
.501	.32	.34	.36	.37	.37	.38
.551	.27	.28	.31	.31	.32	.33
.601	.23	.24	.28	.28	.29	.29
.652	.20	.21	.24	.25	.25	.26
.702	.16	.18	.21	.21	.22	.23
.752	.14	.15	.17	.18	.19	.20
.801	.11	.11	.14	.15	.16	.16
.851	.04	.03	.05	.05	.07	.07
.902	-.05	-.09	-.08	-.06	-.06	-.04
.951	-.25	-.36	-.38	-.37	-.36	-.35

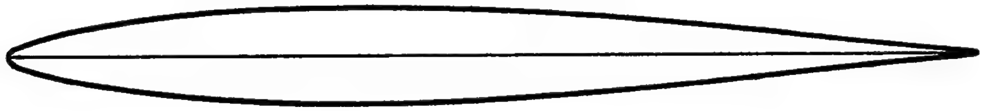
TABLE VIII.- PRESSURE COEFFICIENTS FOR THE NACA 64A406 AIRFOIL SECTION - Concluded

(r) $\alpha_o = 26^o$

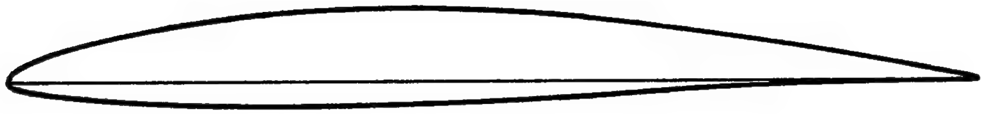
Upper surface				
x/c \ M	0.31	0.42	0.53	0.54
0	-0.83	-0.86	-0.90	-0.89
.006	-.80	-.83	-.88	-.87
.013	-.80	-.83	-.88	-.87
.025	-.79	-.83	-.87	-.87
.050	-.79	-.83	-.88	-.87
.075	-.79	-.84	-.88	-.87
.100	-.80	-.84	-.88	-.87
.150	-.80	-.84	-.89	-.87
.200	-.80	-.84	-.89	-.88
.250	-.81	-.85	-.89	-.88
.298	-.81	-.85	-.90	-.89
.352	-.81	-.86	-.90	-.89
.400	-.82	-.87	-.91	-.90
.450	-.83	-.88	-.92	-.91
.500	-.84	-.88	-.92	-.91
.551	-.85	-.88	-.92	-.91
.600	-.85	-.89	-.93	-.92
.651	-.85	-.89	-.93	-.92
.701	-.85	-.90	-.93	-.93
.752	-.85	-.90	-.93	-.92
.802	-.86	-.90	-.93	-.92
.852	-.84	-.88	-.92	-.90
.902	-.83	-.87	-.90	-.90
.947	-.82	-.86	-.89	-.88
1.000	-.79	-.83	-.86	-.86
Lower surface				
x/c \ M	0.31	0.42	0.53	0.54
0.013	1.02	1.03	1.05	1.07
.026	.97	.99	1.05	1.07
.050	.95	.97	1.00	1.02
.075	.91	.92	.95	.97
.101	.85	.86	.89	.91
.151	.75	.77	.80	.82
.200	.68	.70	.73	.74
.252	.61	.63	.66	.68
.302	.56	.57	.60	.62
.352	.50	.51	.54	.55
.400	.44	.47	.49	.51
.451	.40	.43	.45	.47
.501	.35	.39	.40	.42
.551	.30	.32	.35	.36
.601	.26	.28	.31	.32
.652	.23	.24	.27	.28
.702	.19	.21	.24	.25
.752	.15	.17	.20	.21
.801	.11	.13	.16	.17
.851	.02	.04	.06	.07
.902	-.10	-.08	-.07	-.06
.951	-.36	-.38	-.39	-.38

(s) $\alpha_o = 28^o$

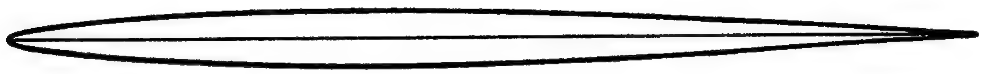
Upper surface			
x/c \ M	0.32	0.42	0.53
0	-0.90	-0.88	-0.91
.006	-.89	-.87	-.89
.013	-.88	-.86	-.89
.025	-.88	-.86	-.89
.050	-.88	-.86	-.89
.075	-.88	-.87	-.90
.100	-.89	-.87	-.89
.150	-.89	-.87	-.90
.200	-.90	-.87	-.91
.250	-.90	-.88	-.91
.298	-.91	-.88	-.92
.352	-.91	-.89	-.92
.400	-.92	-.89	-.93
.450	-.93	-.90	-.94
.500	-.93	-.90	-.94
.551	-.94	-.90	-.95
.600	-.94	-.91	-.95
.651	-.94	-.91	-.95
.701	-.95	-.92	-.96
.752	-.94	-.91	-.95
.802	-.94	-.91	-.95
.852	-.92	-.90	-.93
.902	-.91	-.89	-.92
.947	-.90	-.88	-.92
1.000	-.88	-.86	-.89
Lower surface			
x/c \ M	0.32	0.42	0.53
0.013	0.99	1.02	1.04
.026	1.02	1.05	1.06
.050	.96	1.00	1.03
.075	.95	.96	.98
.101	.90	.91	.93
.151	.82	.82	.84
.200	.73	.75	.77
.252	.67	.68	.70
.302	.60	.62	.64
.352	.54	.55	.57
.400	.49	.51	.53
.451	.44	.47	.48
.501	.39	.42	.43
.551	.34	.35	.39
.601	.29	.31	.35
.652	.25	.27	.31
.702	.21	.23	.27
.752	.17	.19	.23
.801	.13	.14	.19
.851	.03	.05	.09
.902	-.09	-.09	-.05
.951	-.36	-.39	-.37



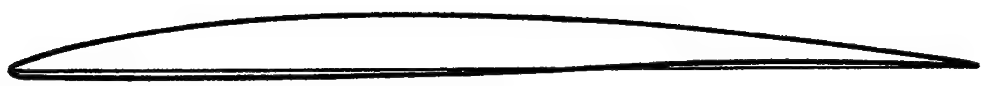
NACA 64A010 airfoil section



NACA 64A410 airfoil section



NACA 64A006 airfoil section



NACA 64A406 airfoil section

Figure 1.– Profiles of the airfoil sections investigated.

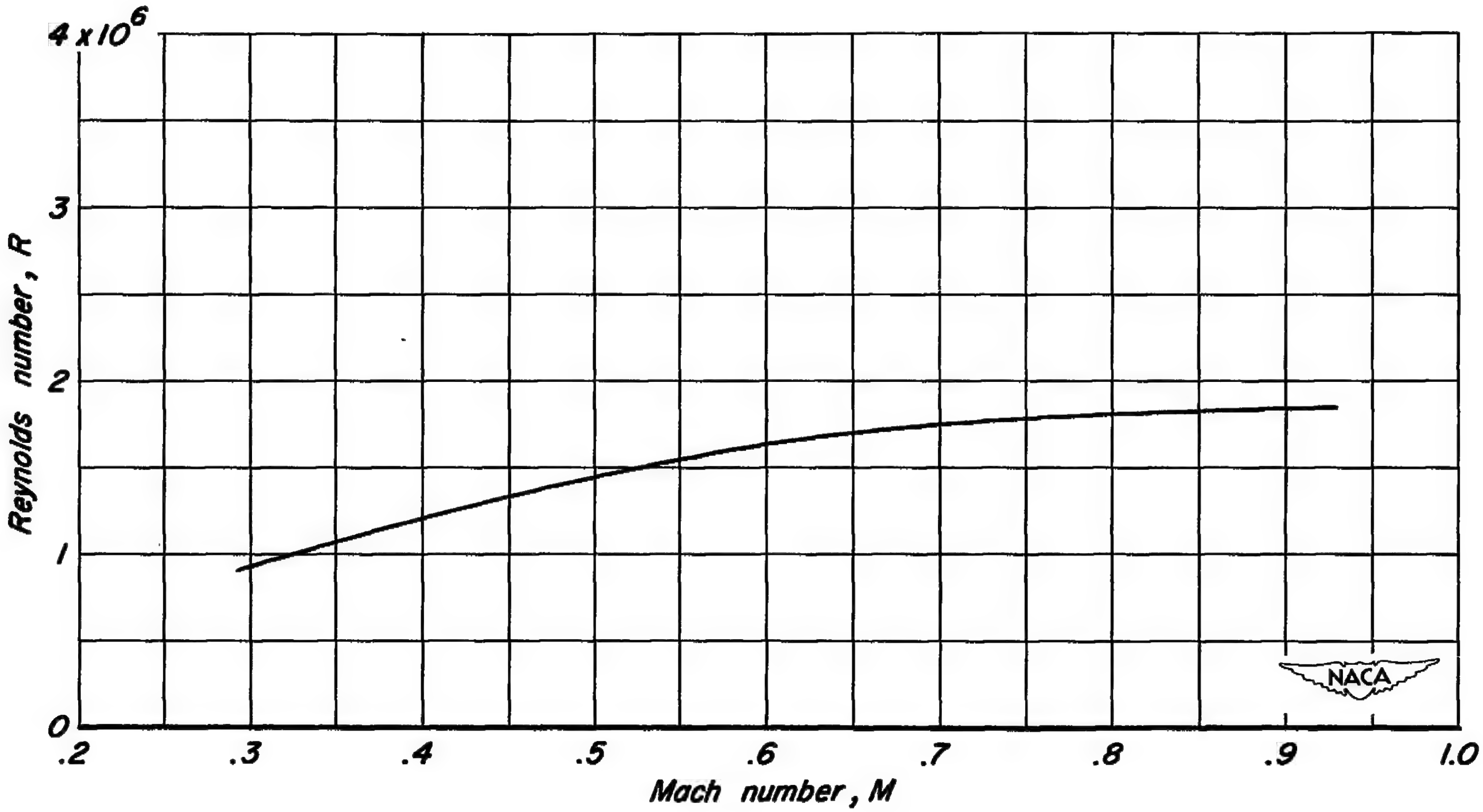
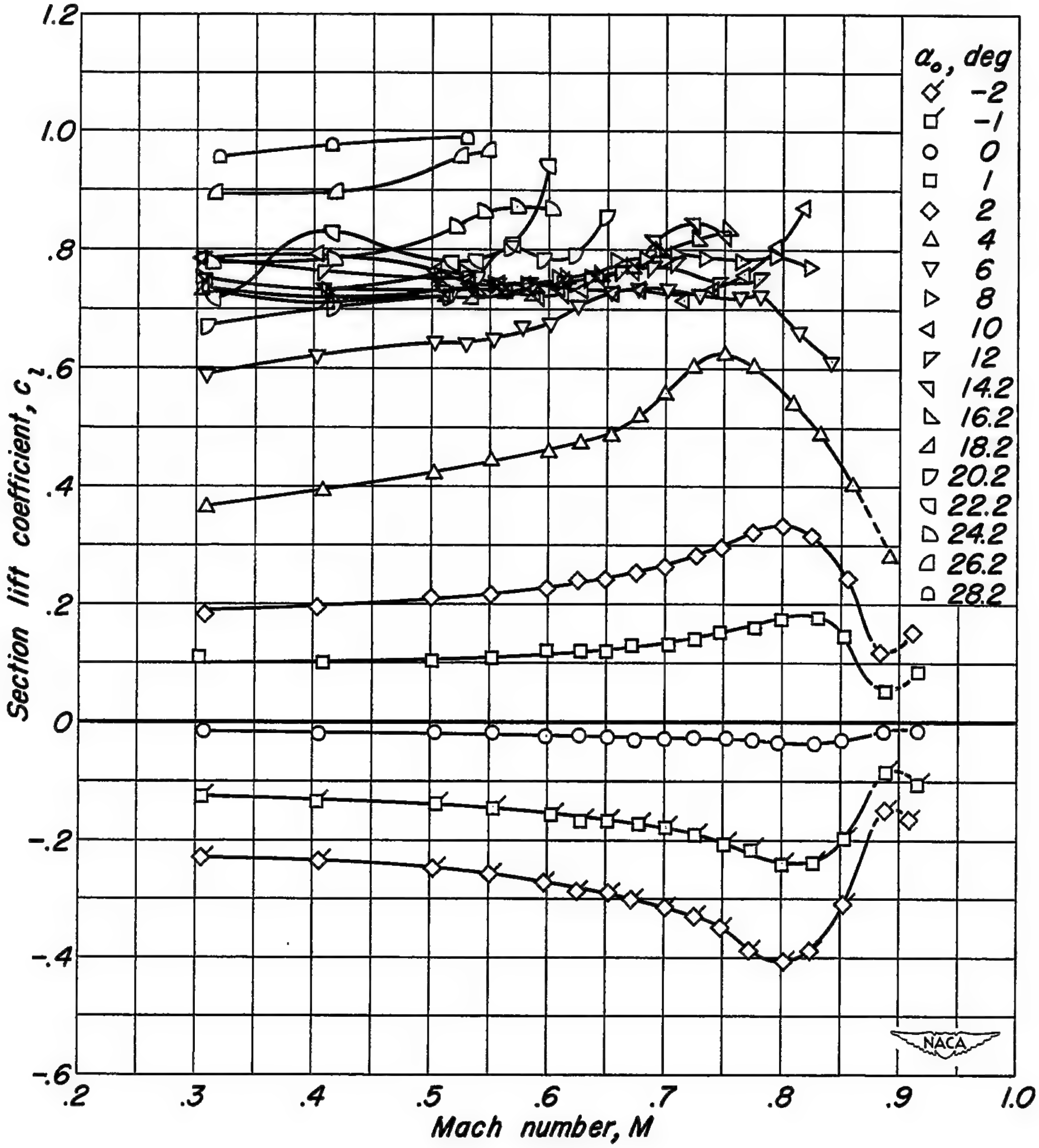
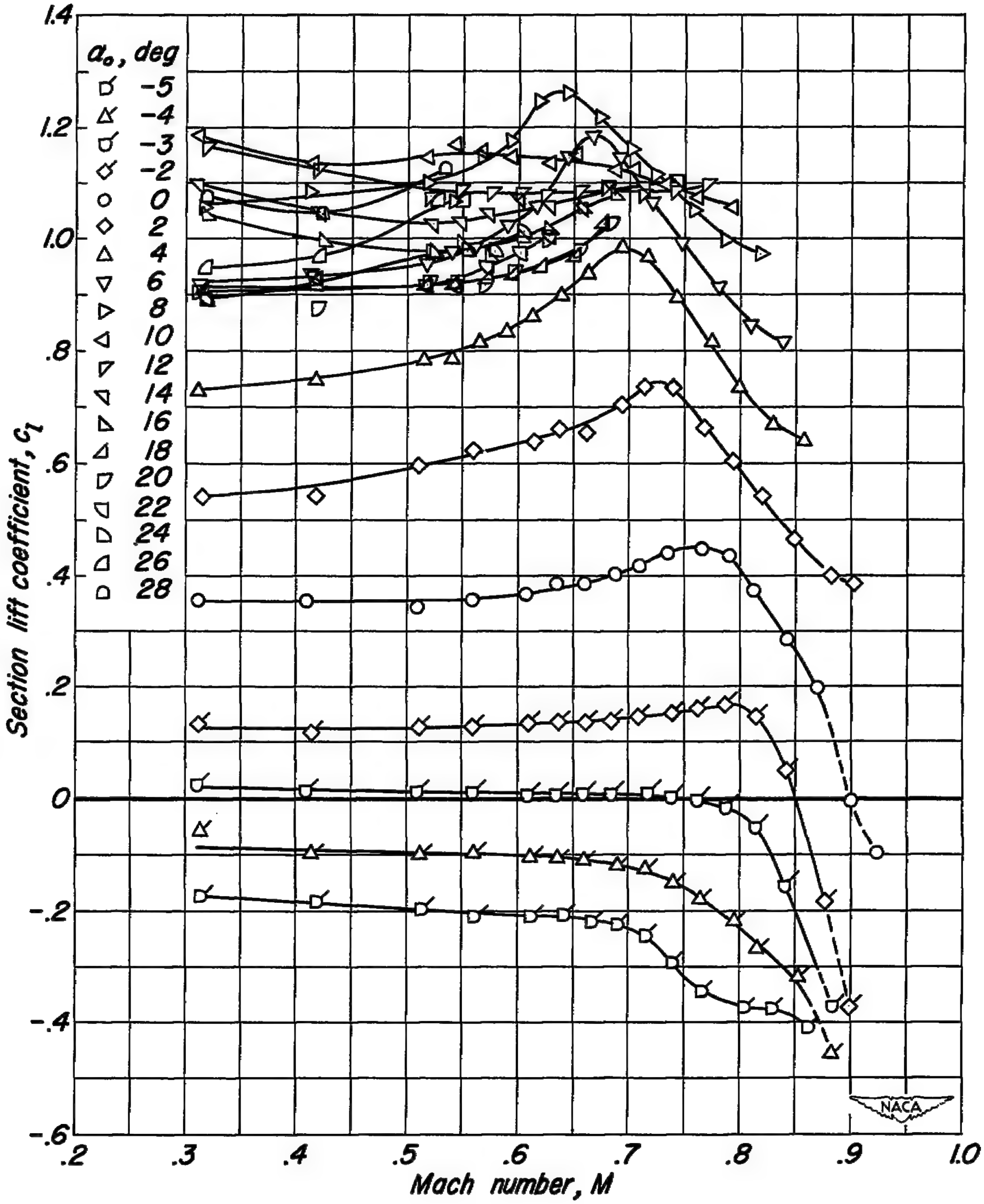


Figure 2.– Variation of Reynolds number with Mach number for the present tests in the Ames 1- by 3 1/2-foot high-speed wind tunnel.



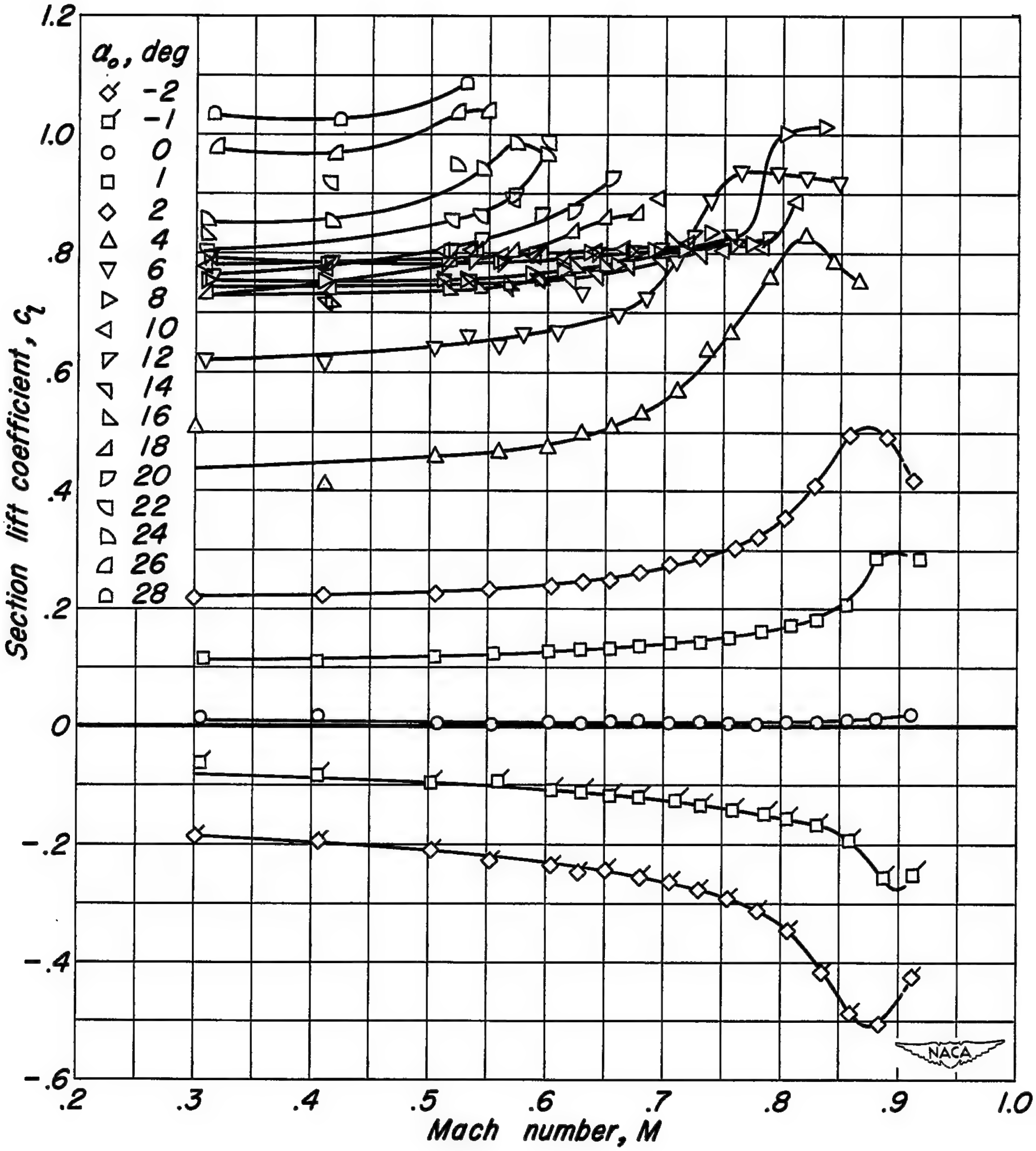
(a) NACA 64A010 airfoil section.

Figure 3.– Variation of section lift coefficient with Mach number at constant section angle of attack.



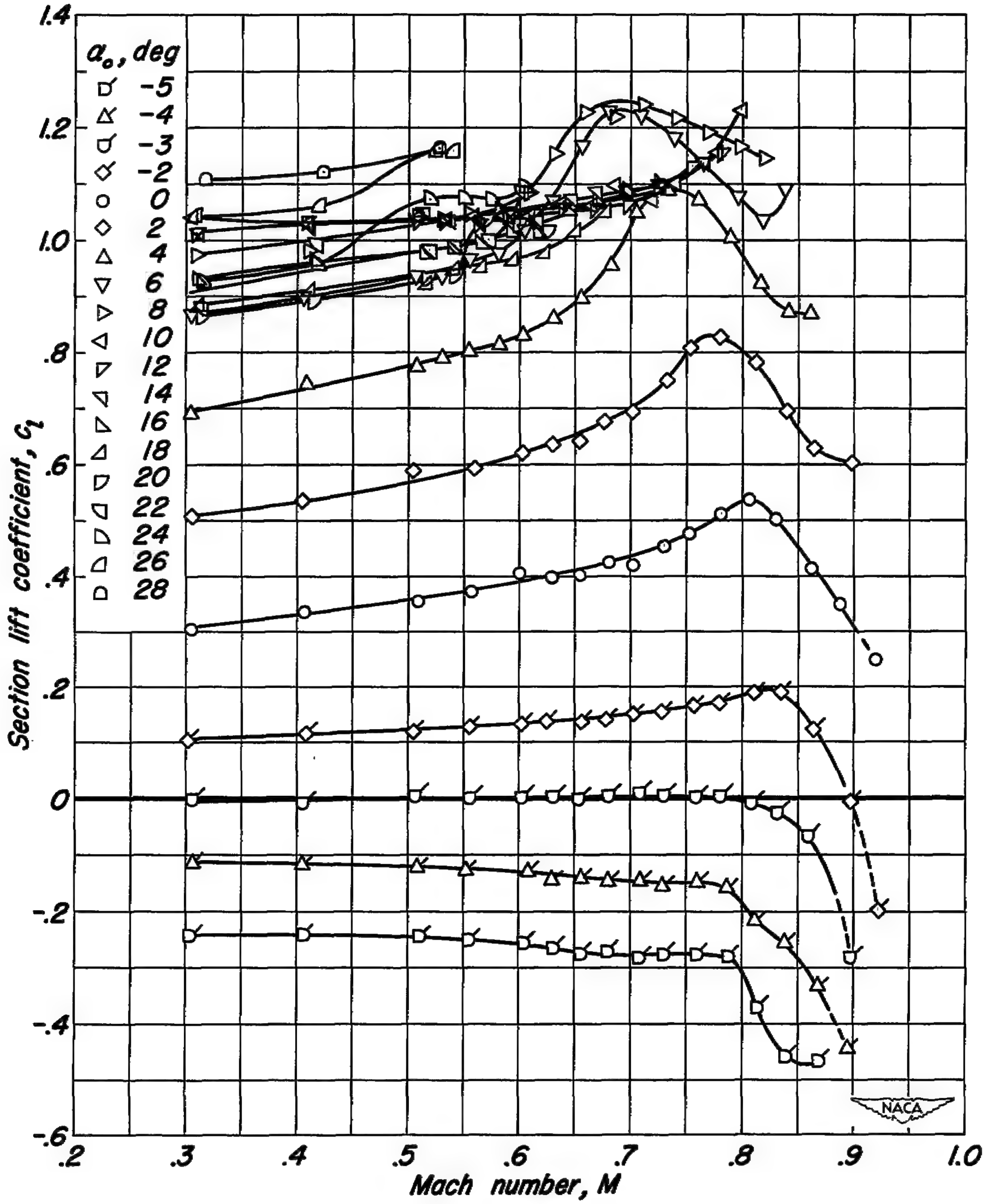
(b) NACA 64A410 airfoil section.

Figure 3.- Continued.



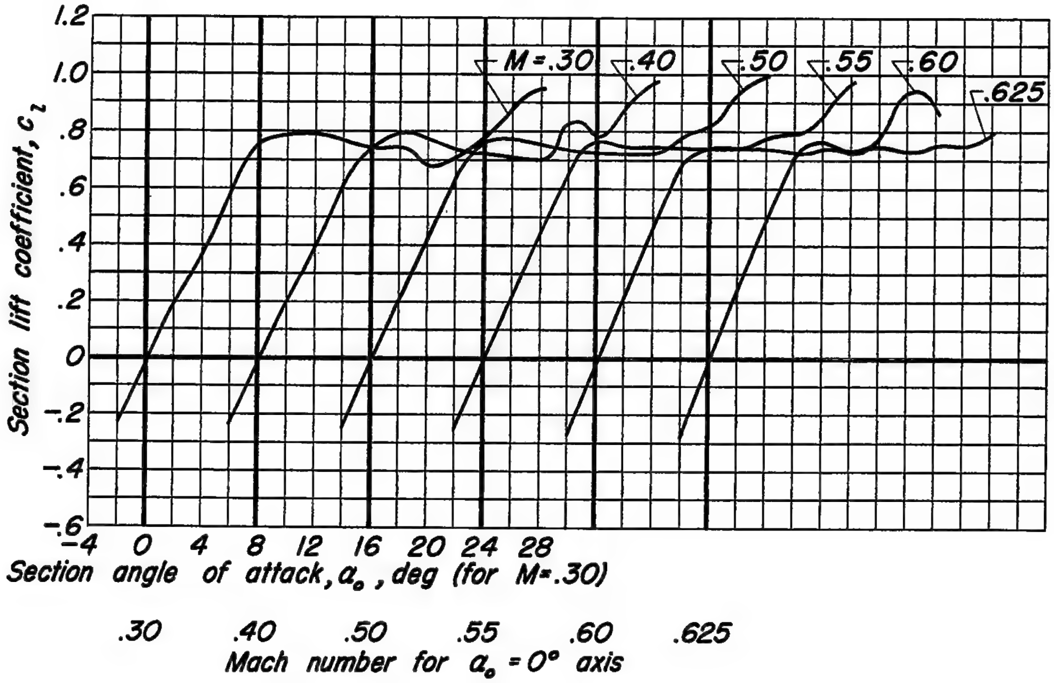
(c) NACA 64A006 airfoil section.

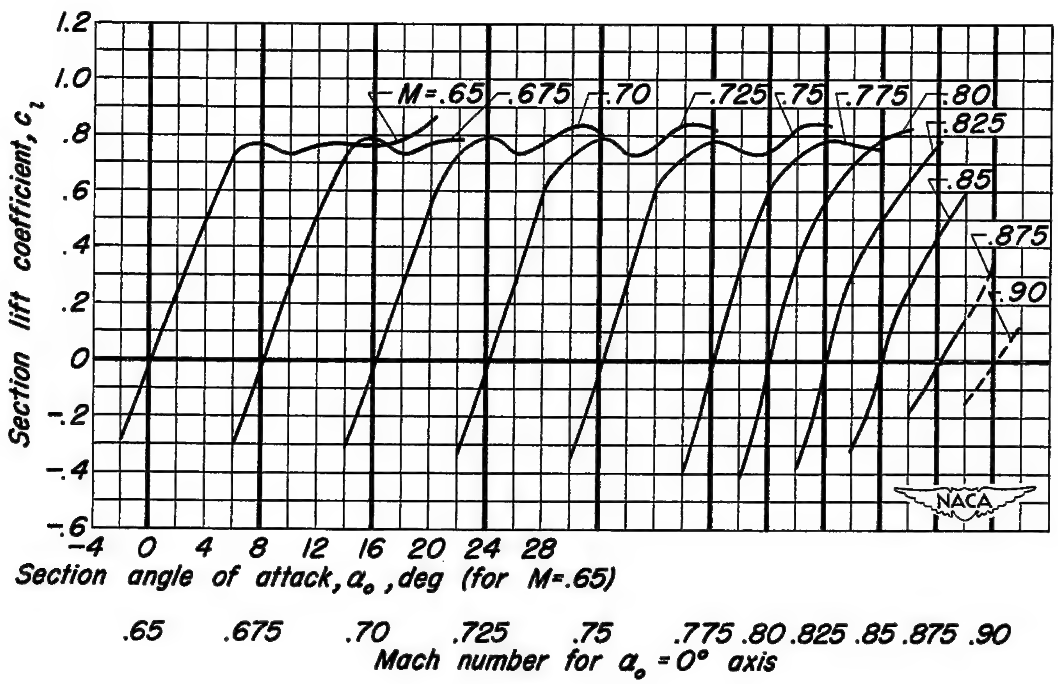
Figure 3.- Continued.



(d) NACA 64A406 airfoil section.

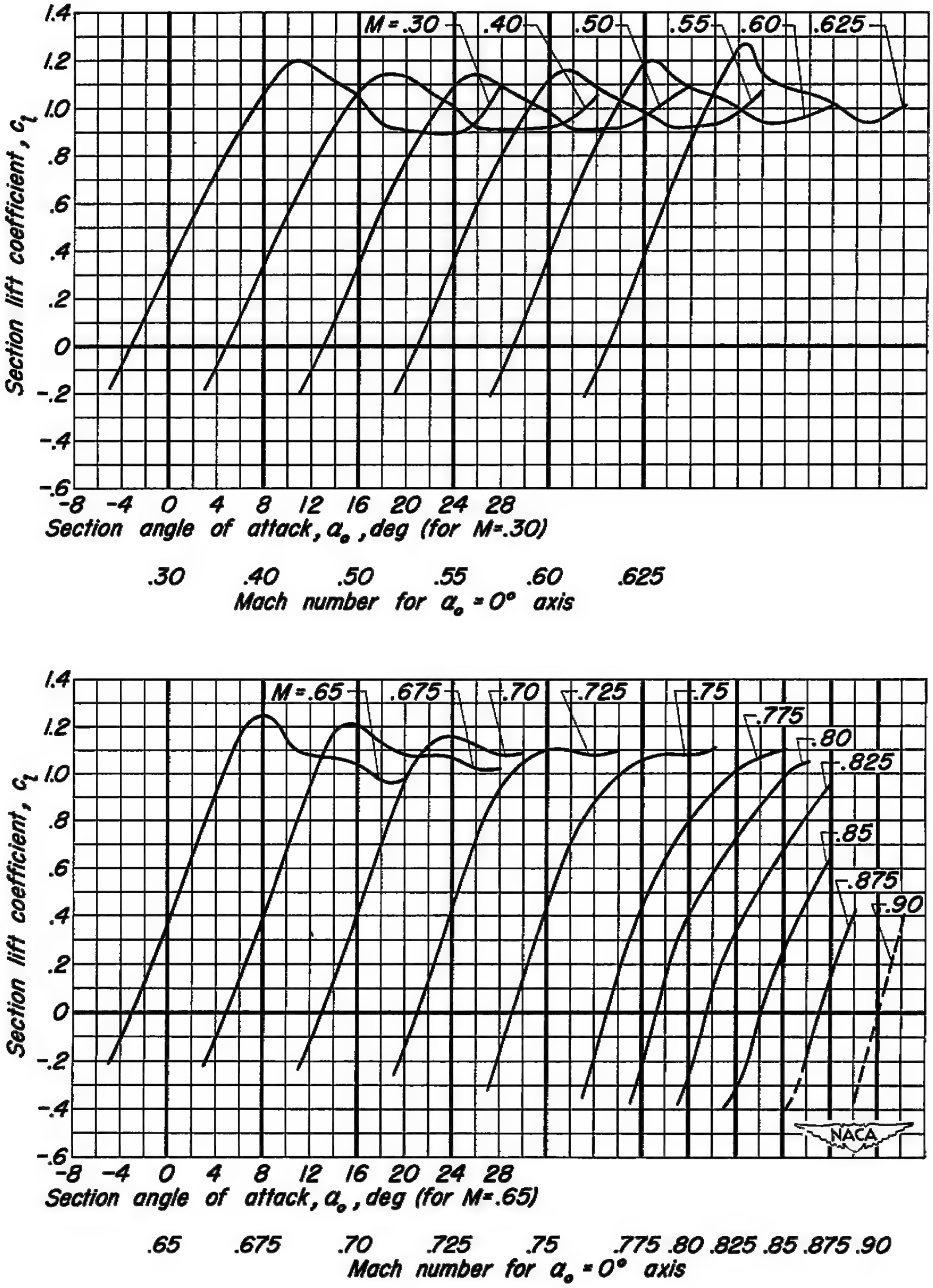
Figure 3.– Concluded.





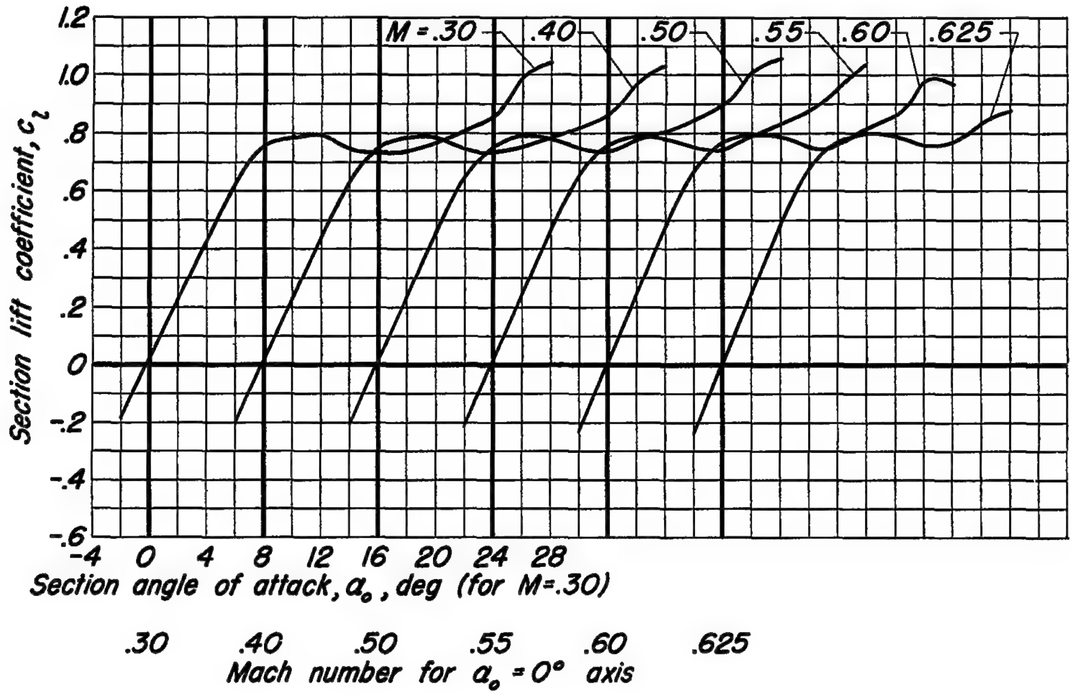
(a) NACA 64A010 airfoil section.

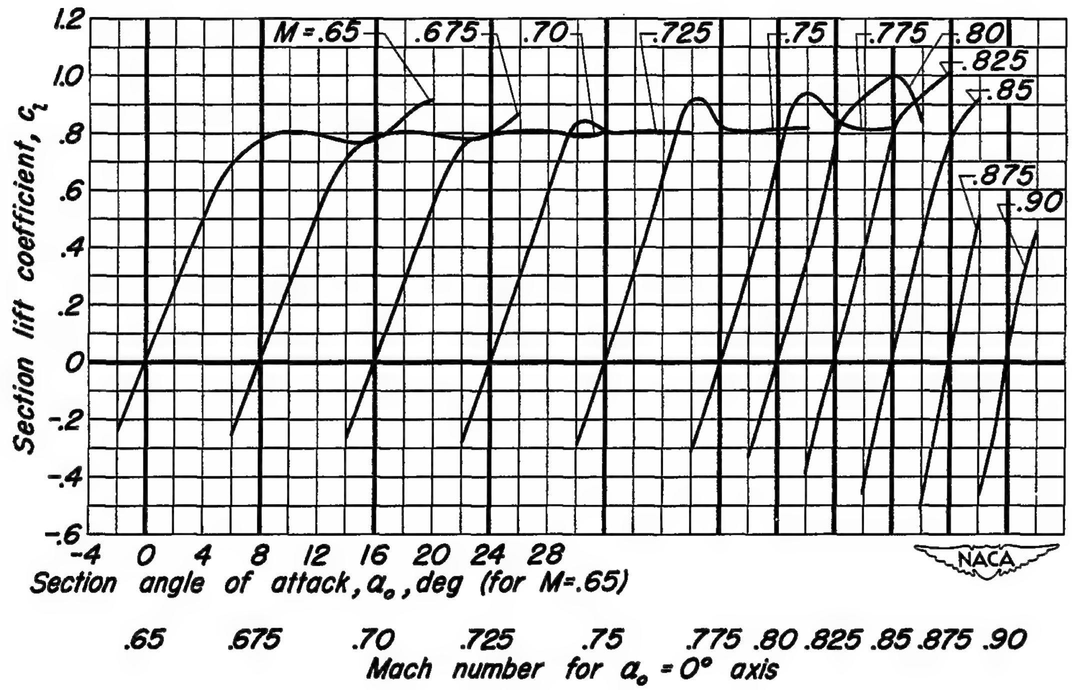
Figure 4.– Variation of section lift coefficient with section angle of attack at constant Mach number.



(b) NACA 64A410 airfoil section.

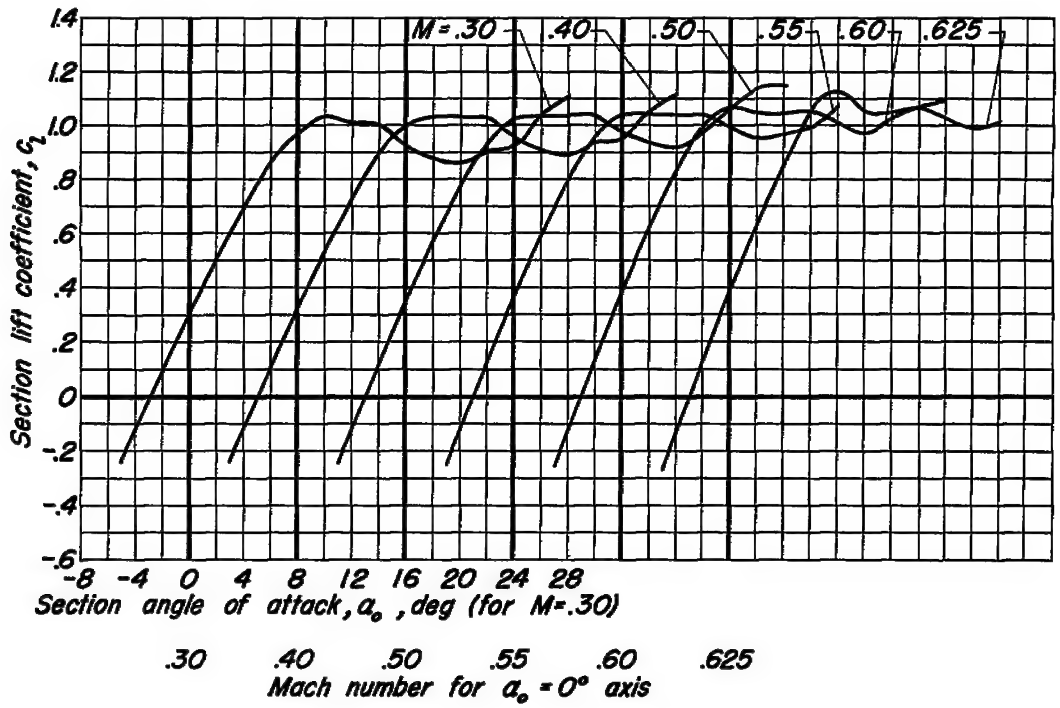
Figure 4.– Continued.

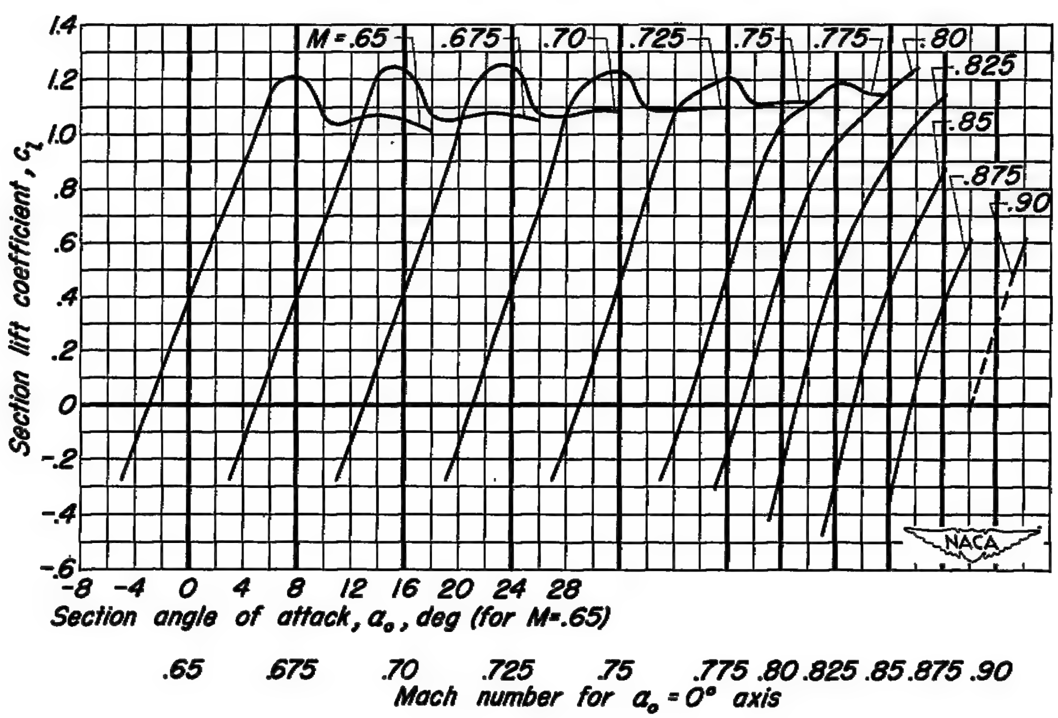




(c) NACA 64A006 airfoil section.

Figure 4.–Continued.





(d) NACA 64A406 airfoil section.

Figure 4.– Concluded.

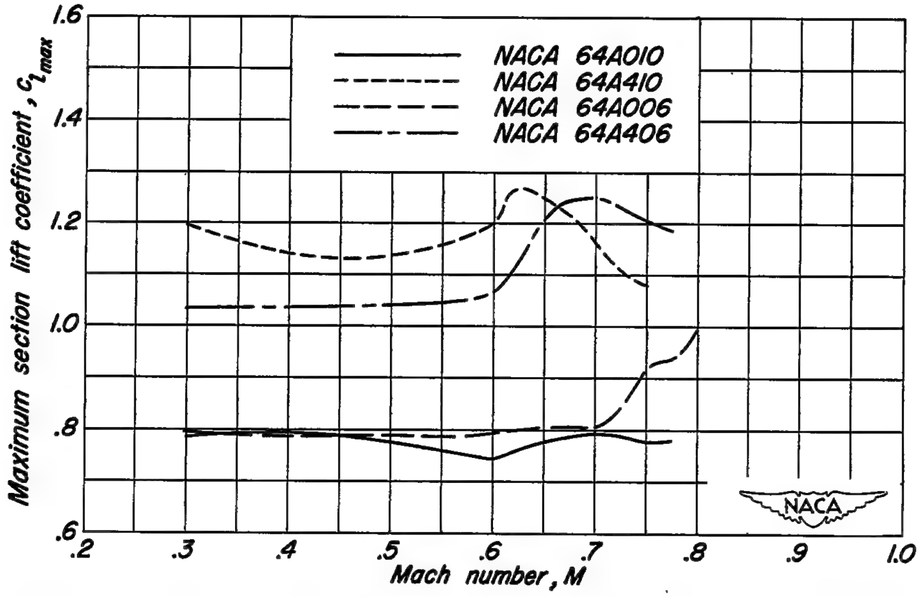


Figure 5.- Effect of Mach number on the maximum section lift coefficient.

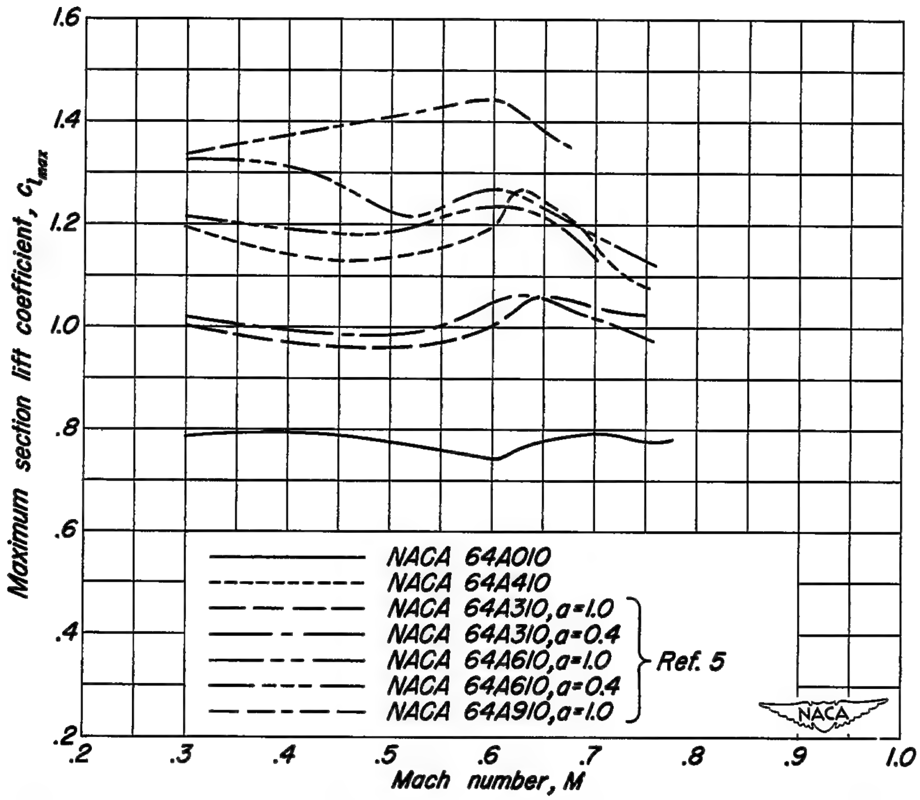
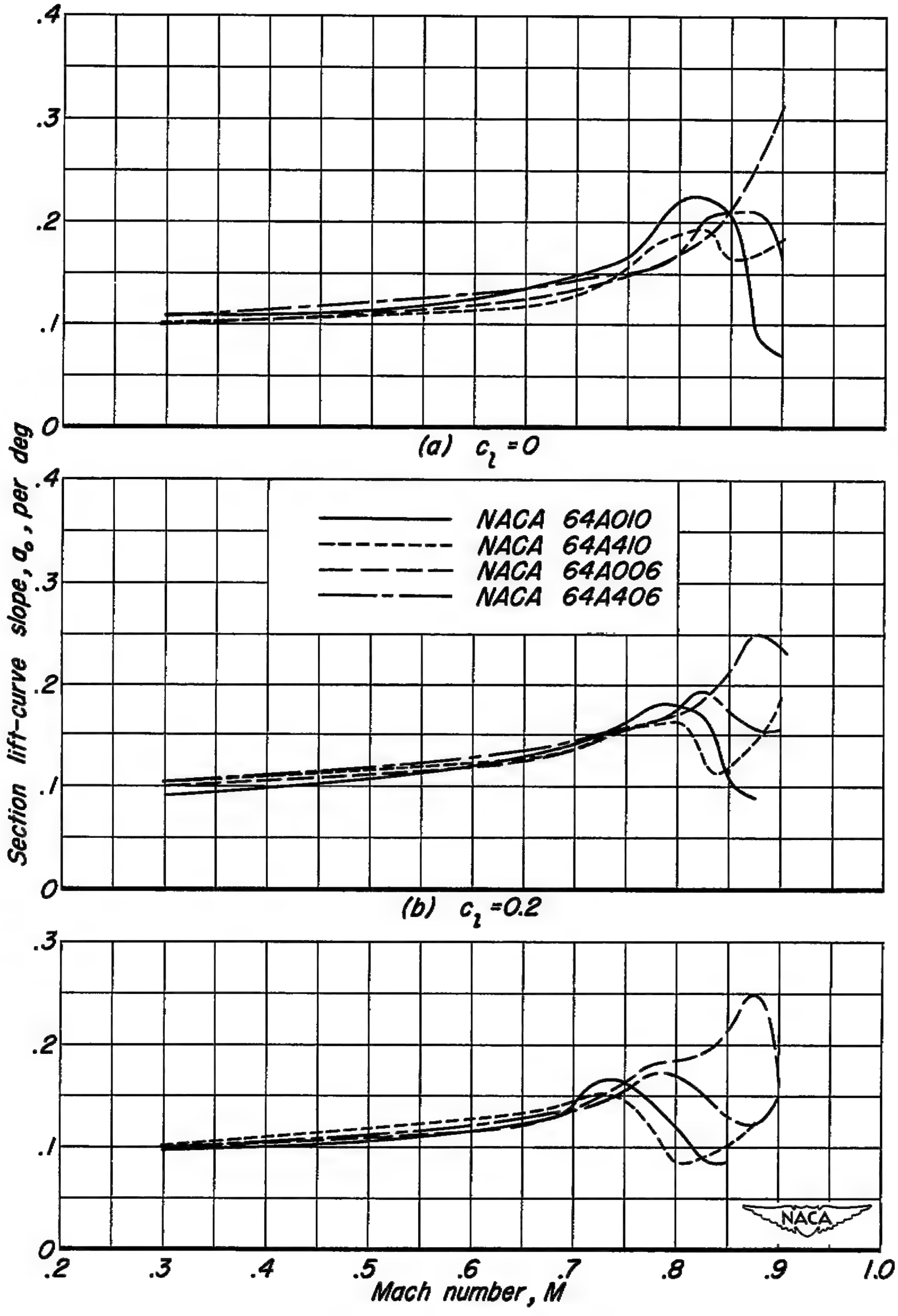
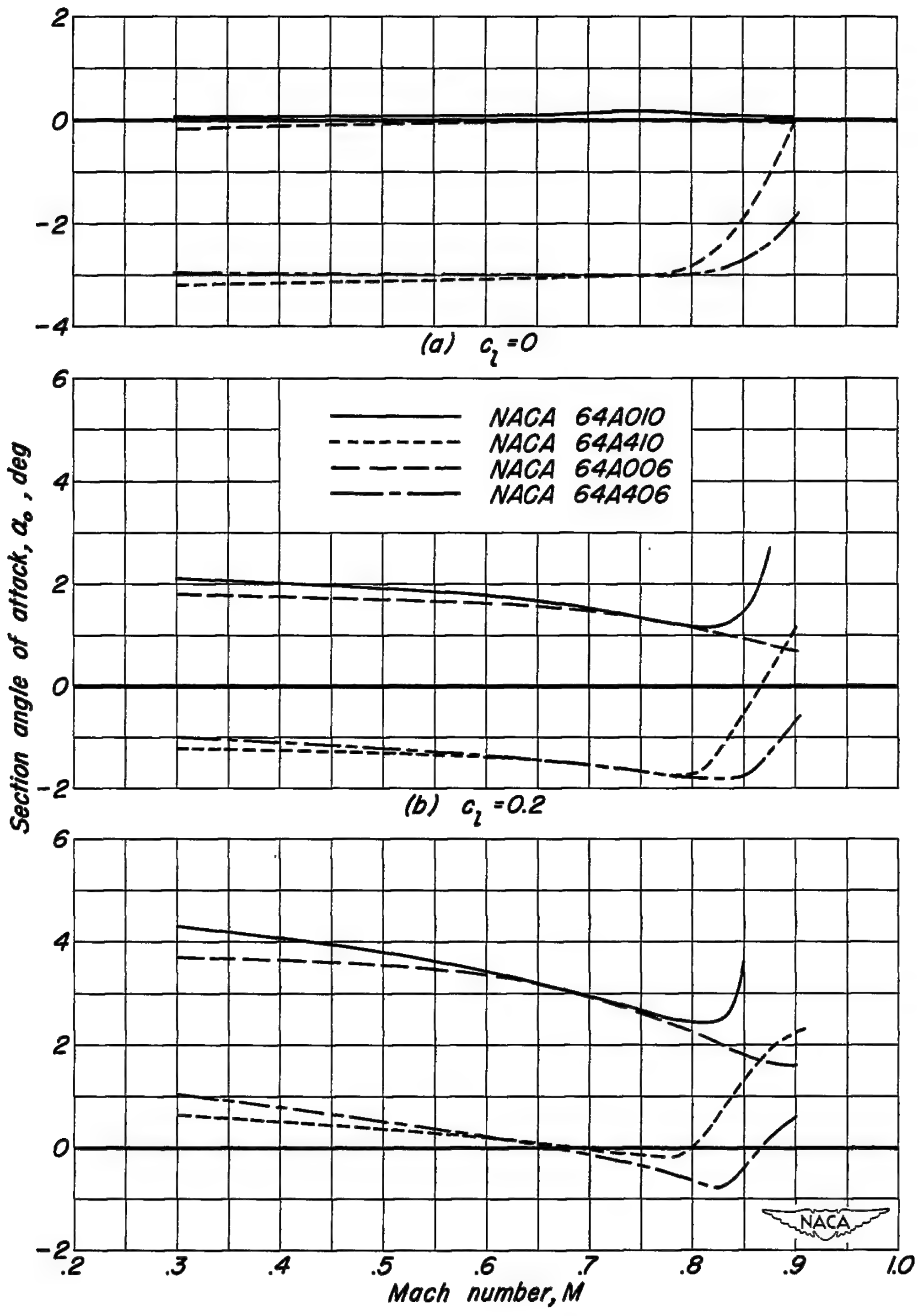


Figure 6.- Effect of type and amount of camber on the variation of the maximum section lift coefficient with Mach number.



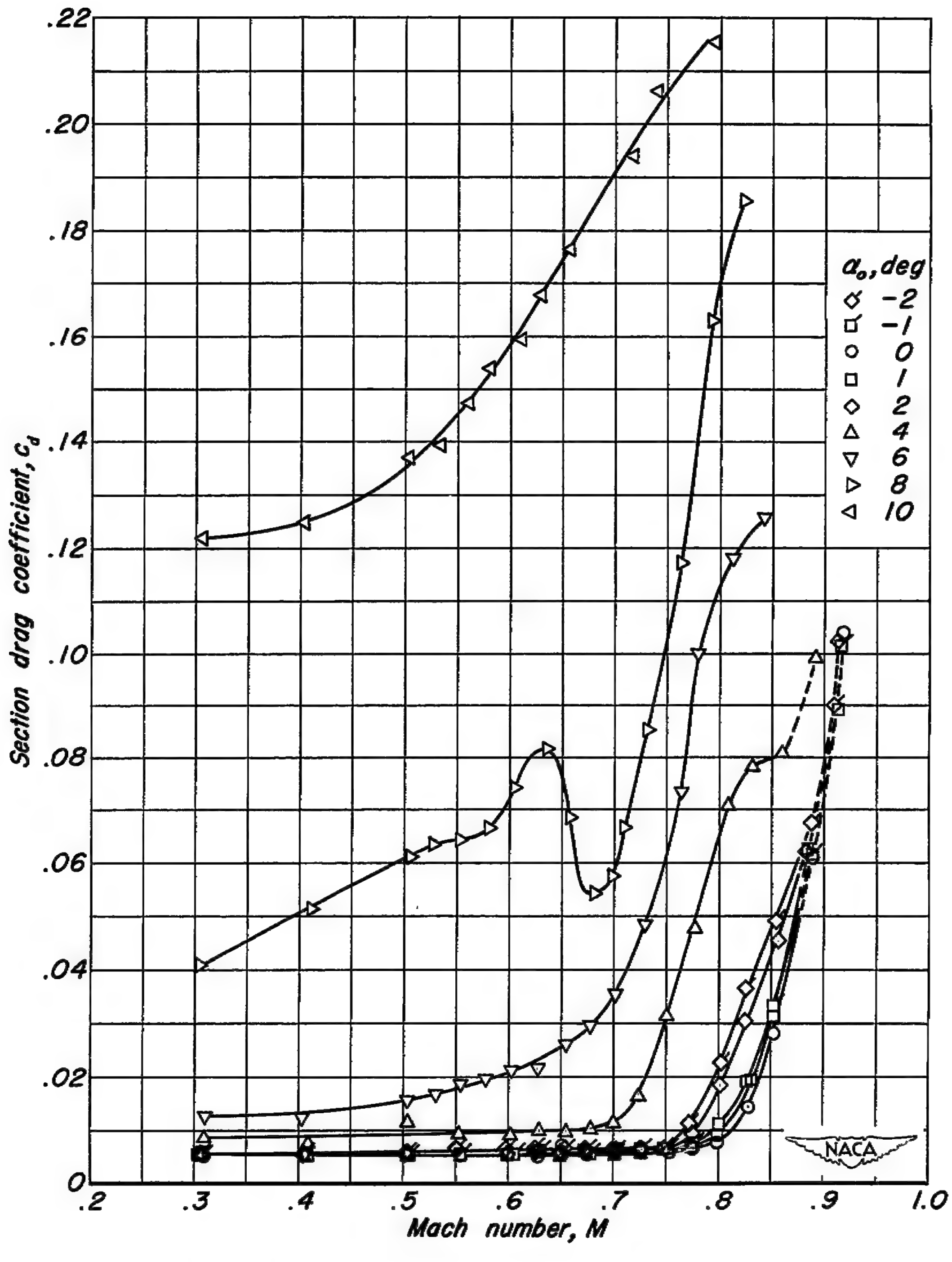
(c) c_l = 0.4

Figure 7.- Effect of Mach number on the section lift-curve slope.



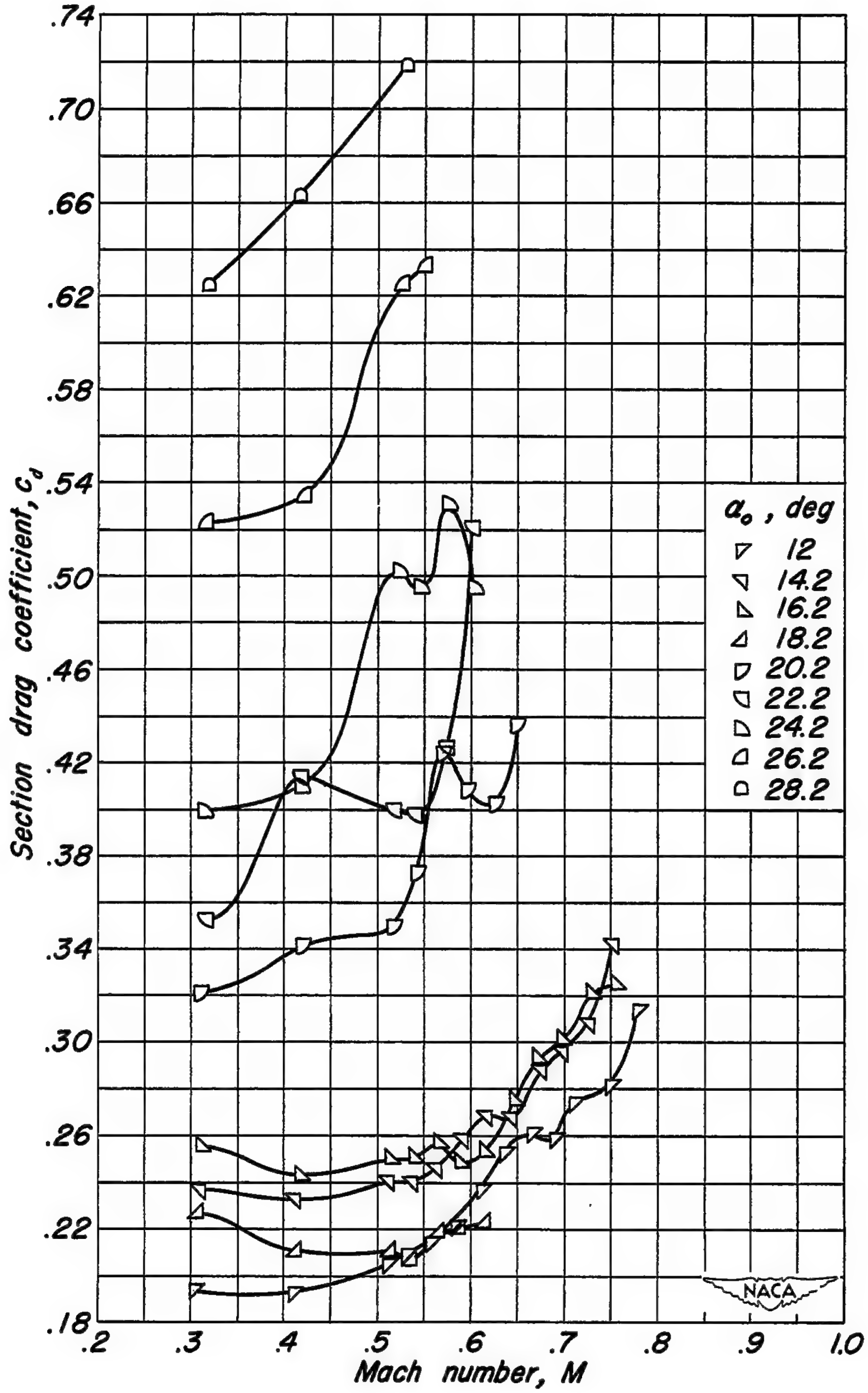
(c) $c_l = 0.4$

Figure 8.- Effect of Mach number on the section angle of attack required for a constant section lift coefficient.



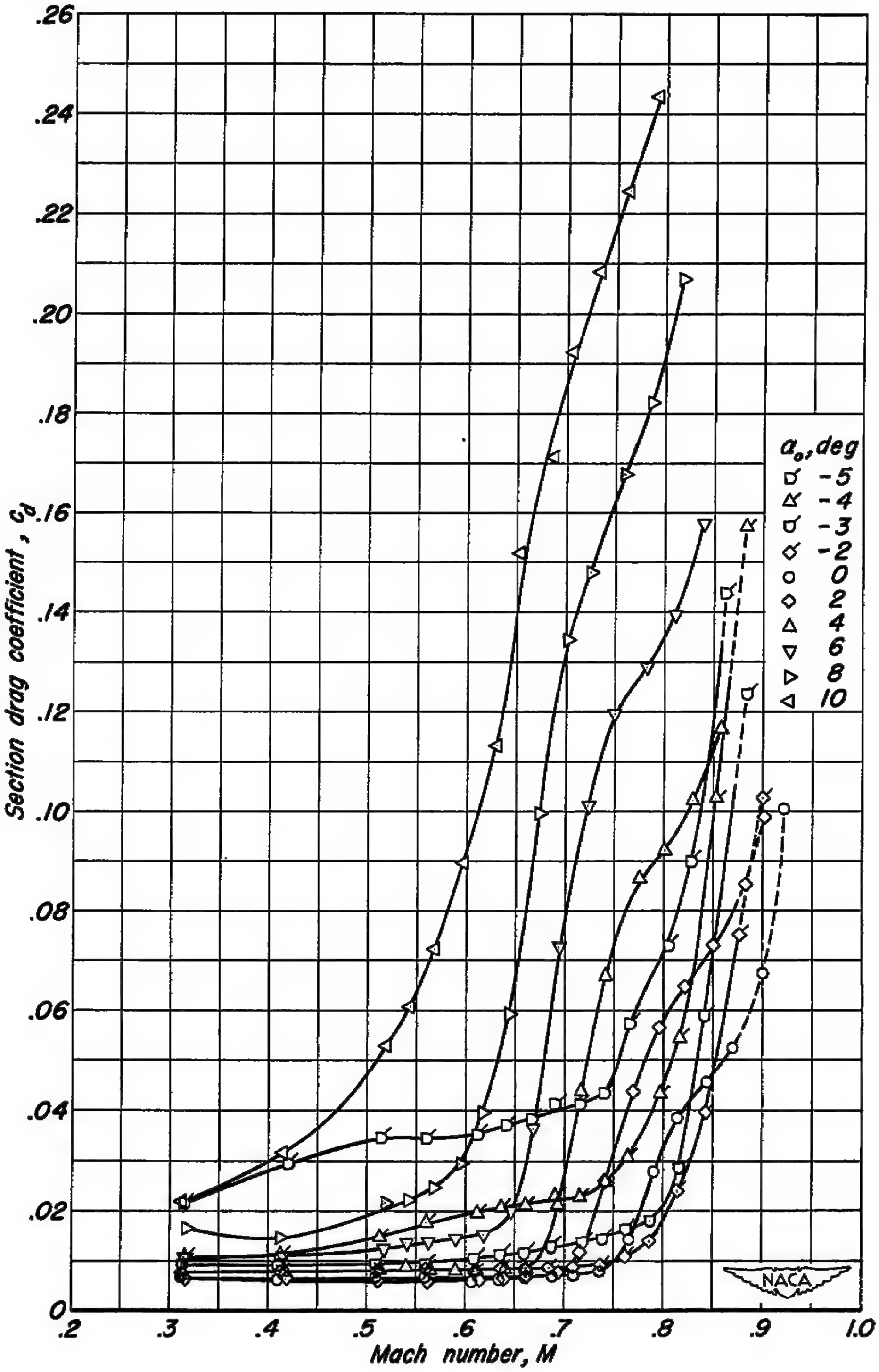
(a) NACA 64A010 airfoil section; $\alpha_o = -2°$ to $10°$.

Figure 9.- Variation of section drag coefficient with Mach number at constant section angle of attack.



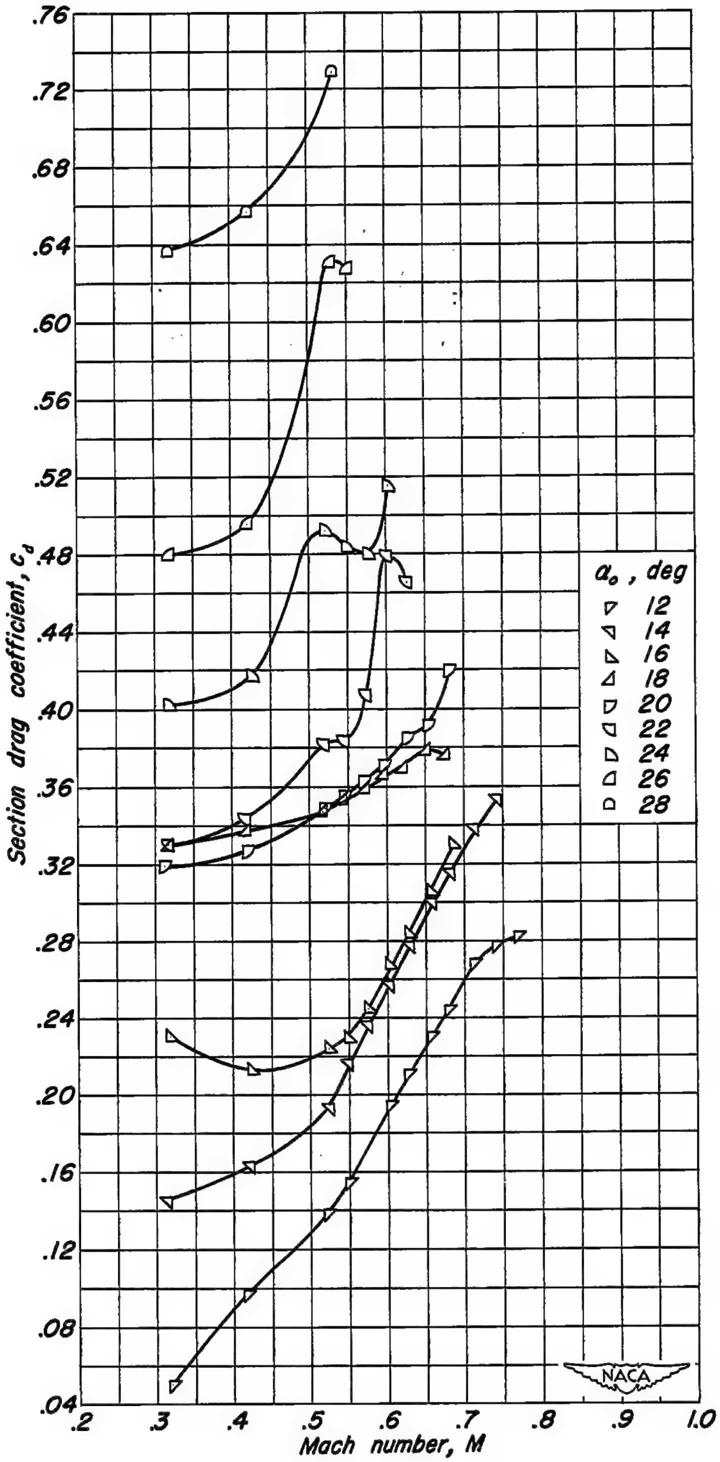
(a) Concluded; α_o =12° to 28.2° (Note change in scale).

Figure 9. – Continued.



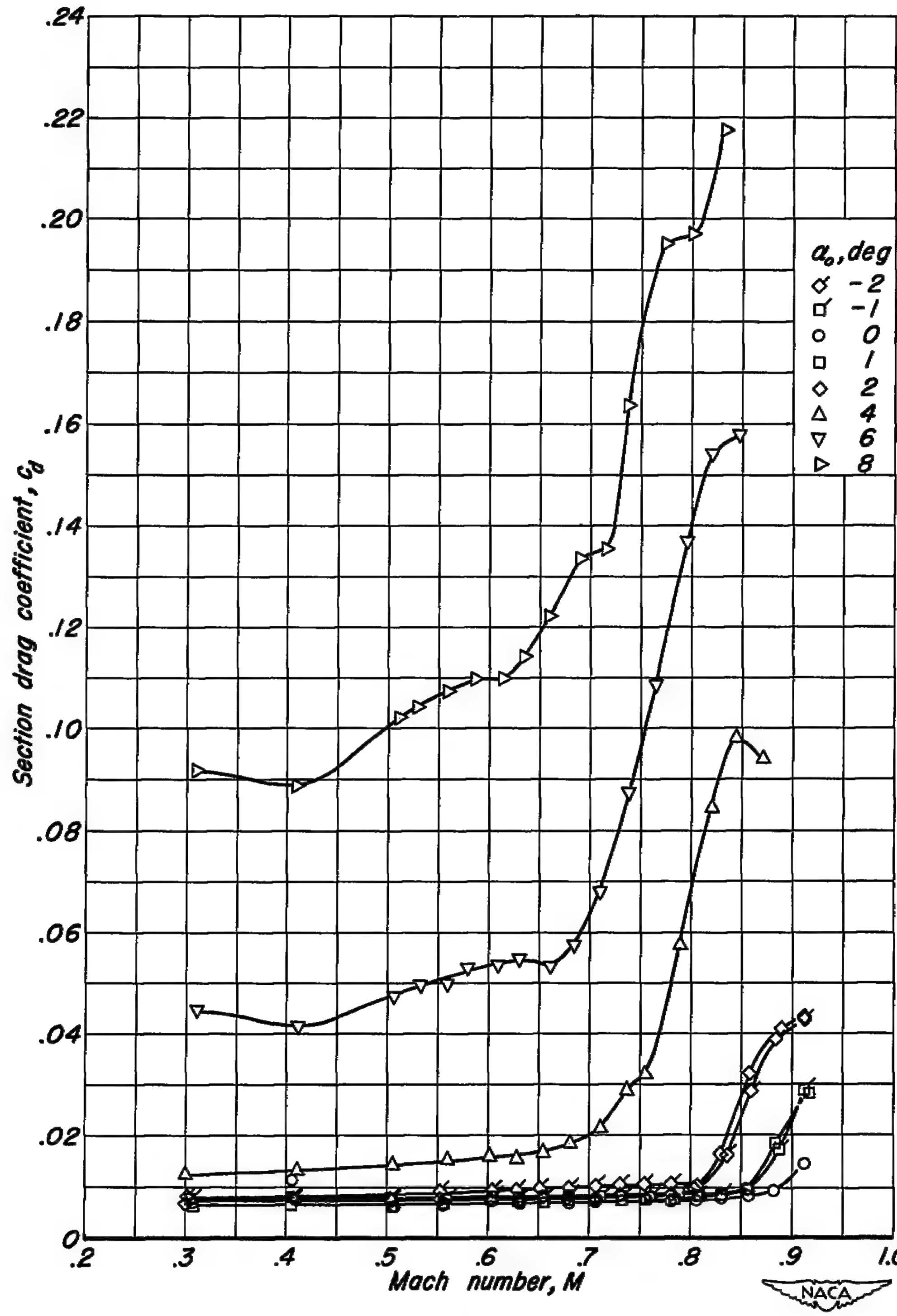
(b) NACA 64A410 airfoil section; α_o = -5° to 10°.

Figure 9.- Continued.



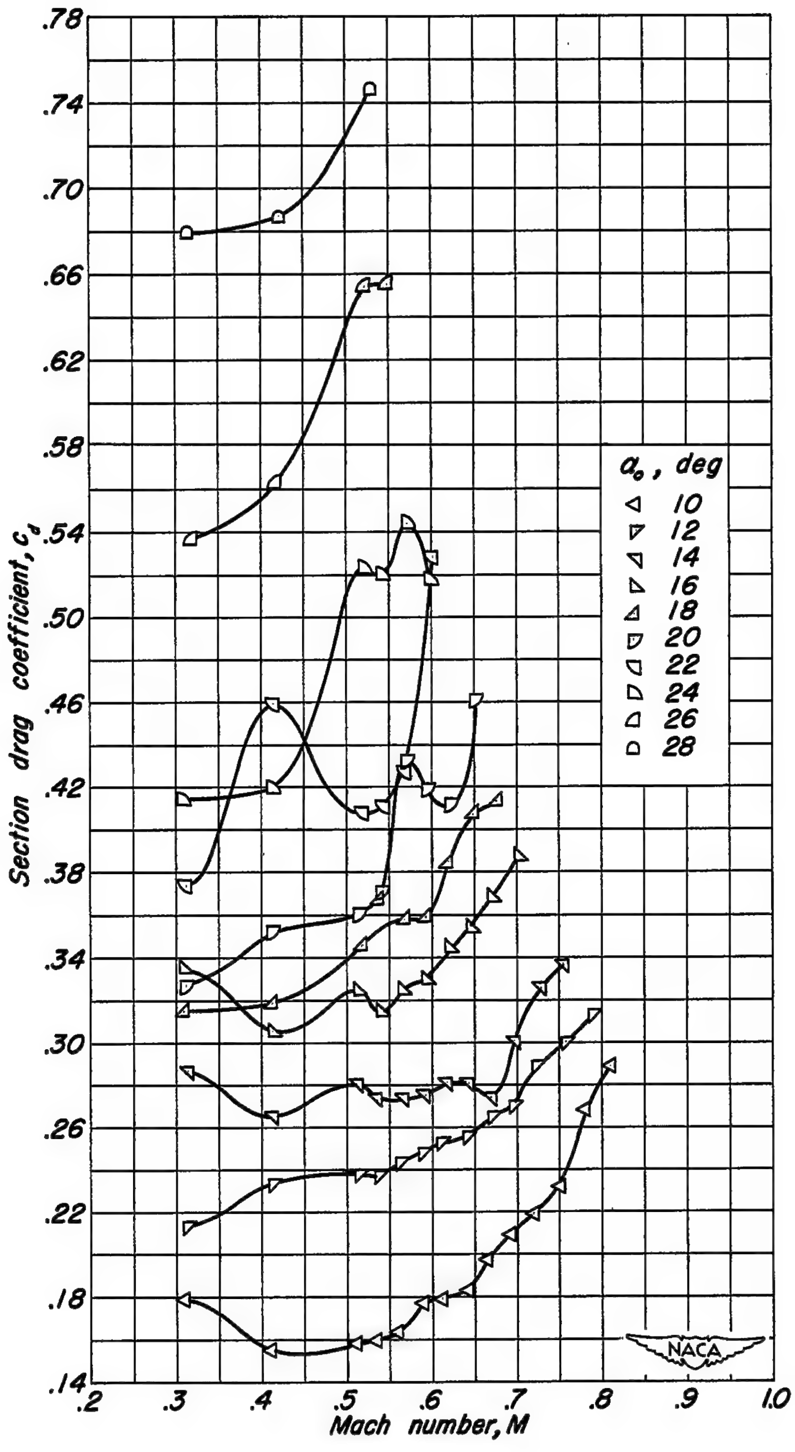
(b) Concluded; α_o =12° to 28° (Note change in scale).

Figure 9.- Continued.



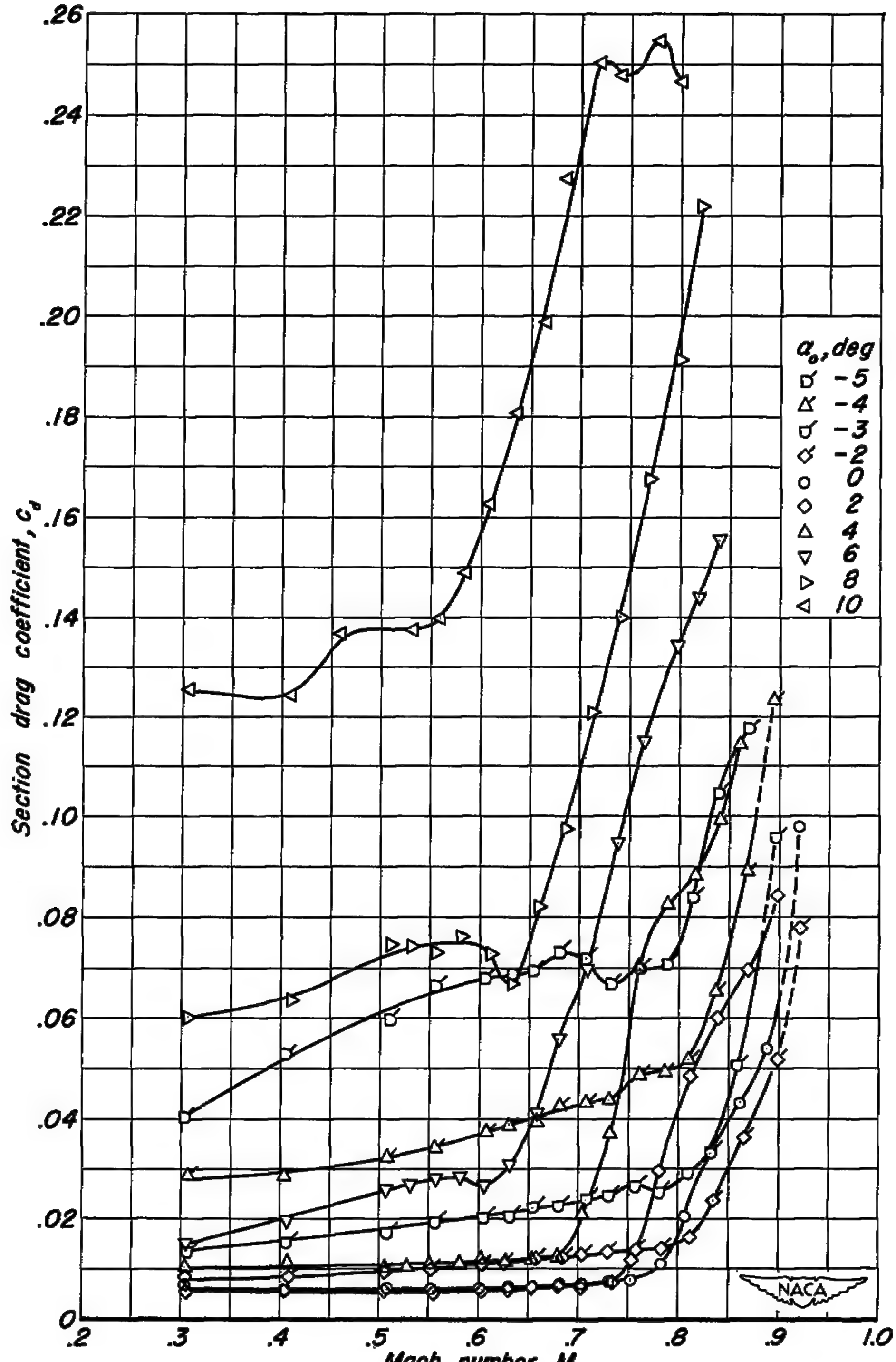
(c) NACA 64A006 airfoil section; α_o = -2° to 8°.

Figure 9.- Continued.



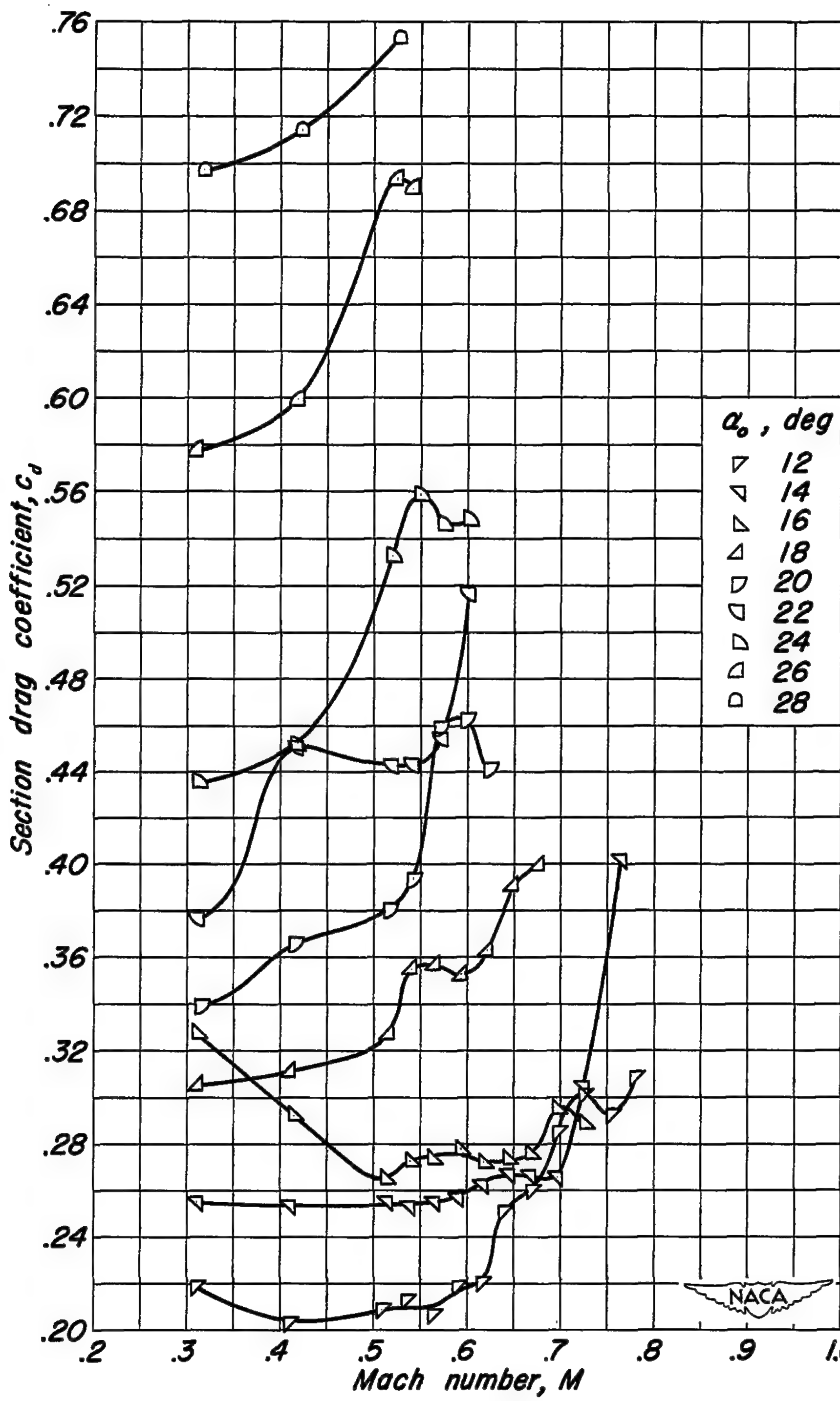
(c) Concluded; α_o = 10° to 28° (Note change in scale).

Figure 9.- Continued.



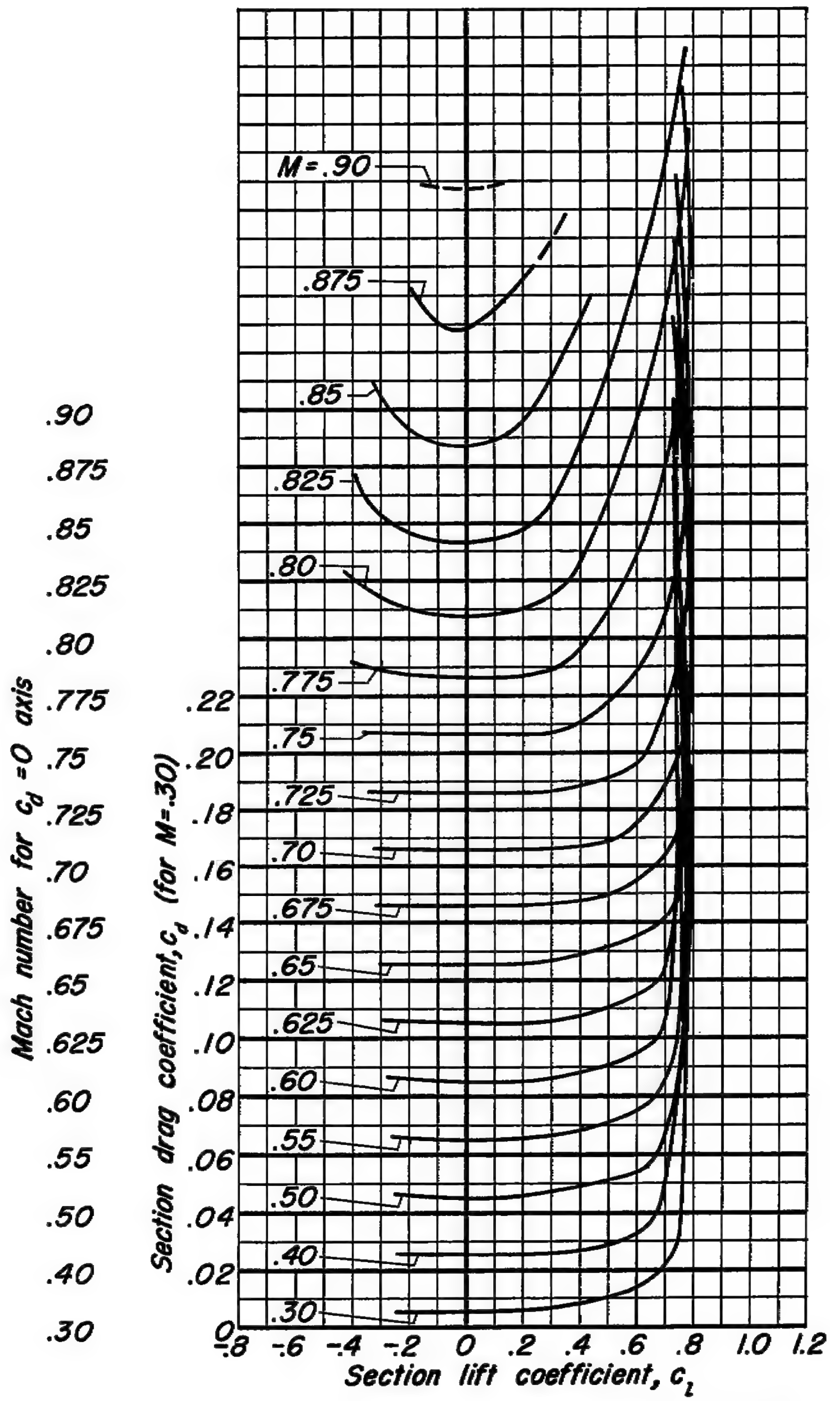
(d) NACA 64A406 airfoil section; α_o = -5° to 10°.

Figure 9.- Continued.



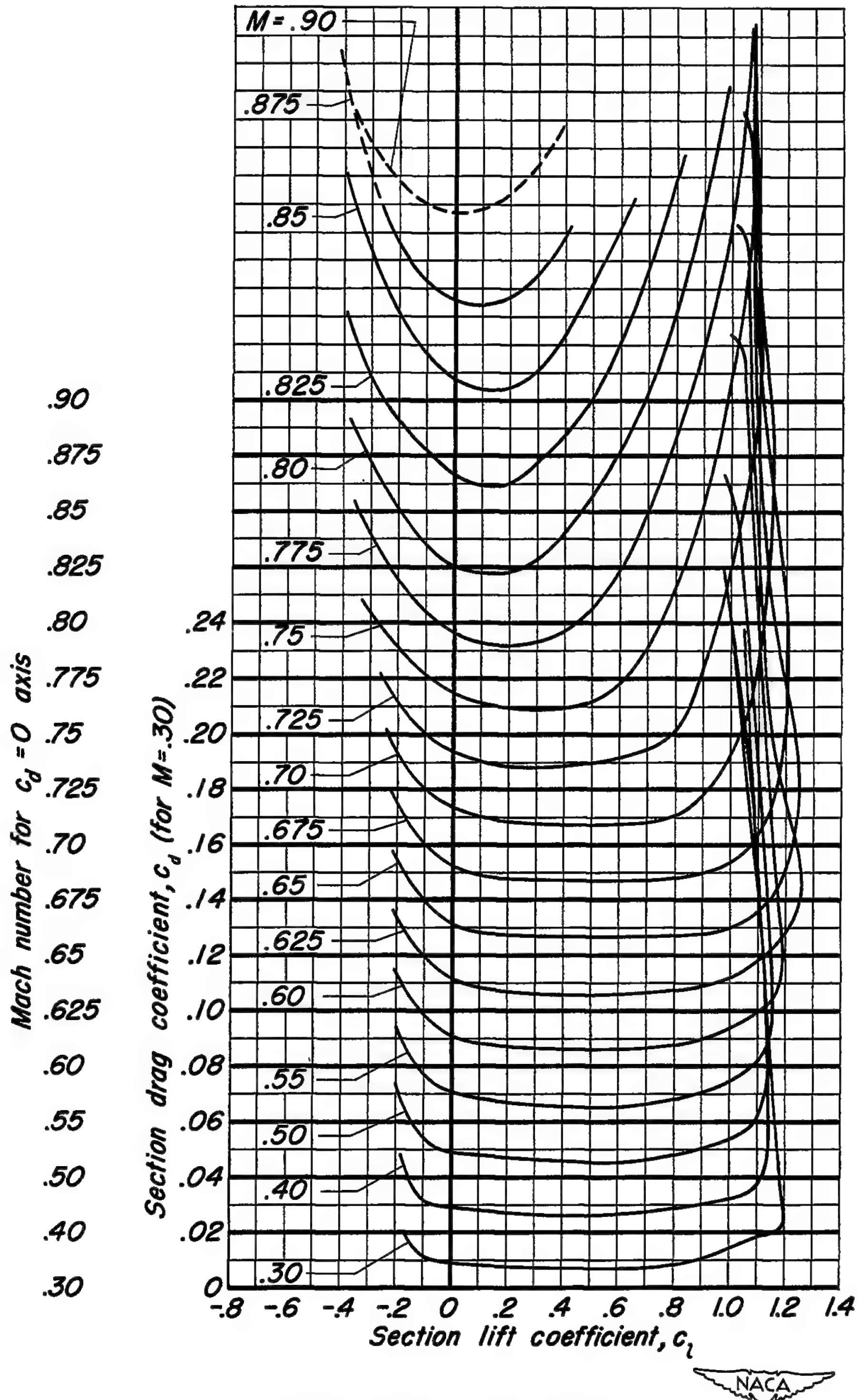
(d) Concluded; $\alpha_o = 12°$ to $28°$ (Note change in scale).

Figure 9. – Concluded.



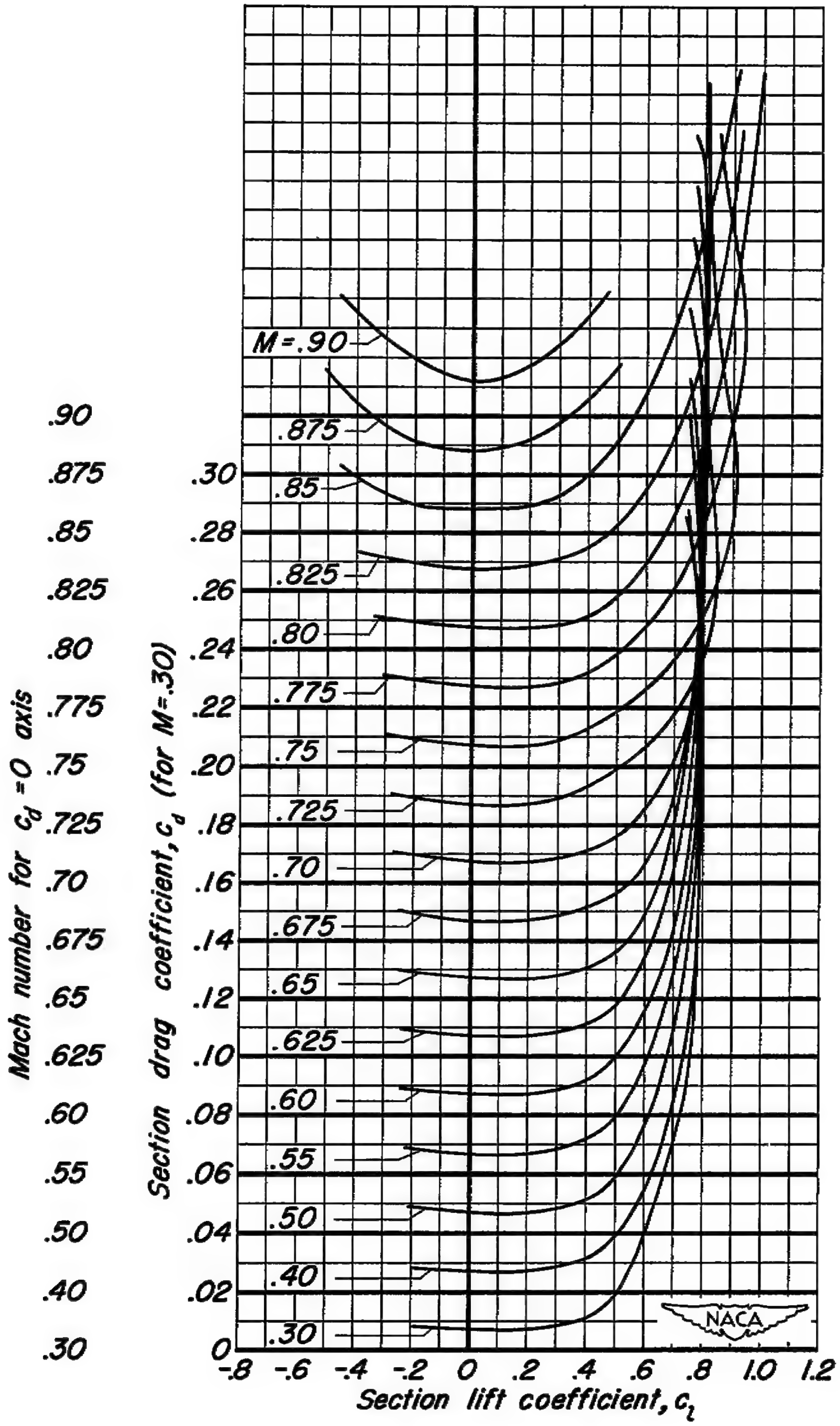
(a) NACA 64A010 airfoil section.

Figure 10.- Variation of section drag coefficient with section lift coefficient at constant Mach number.



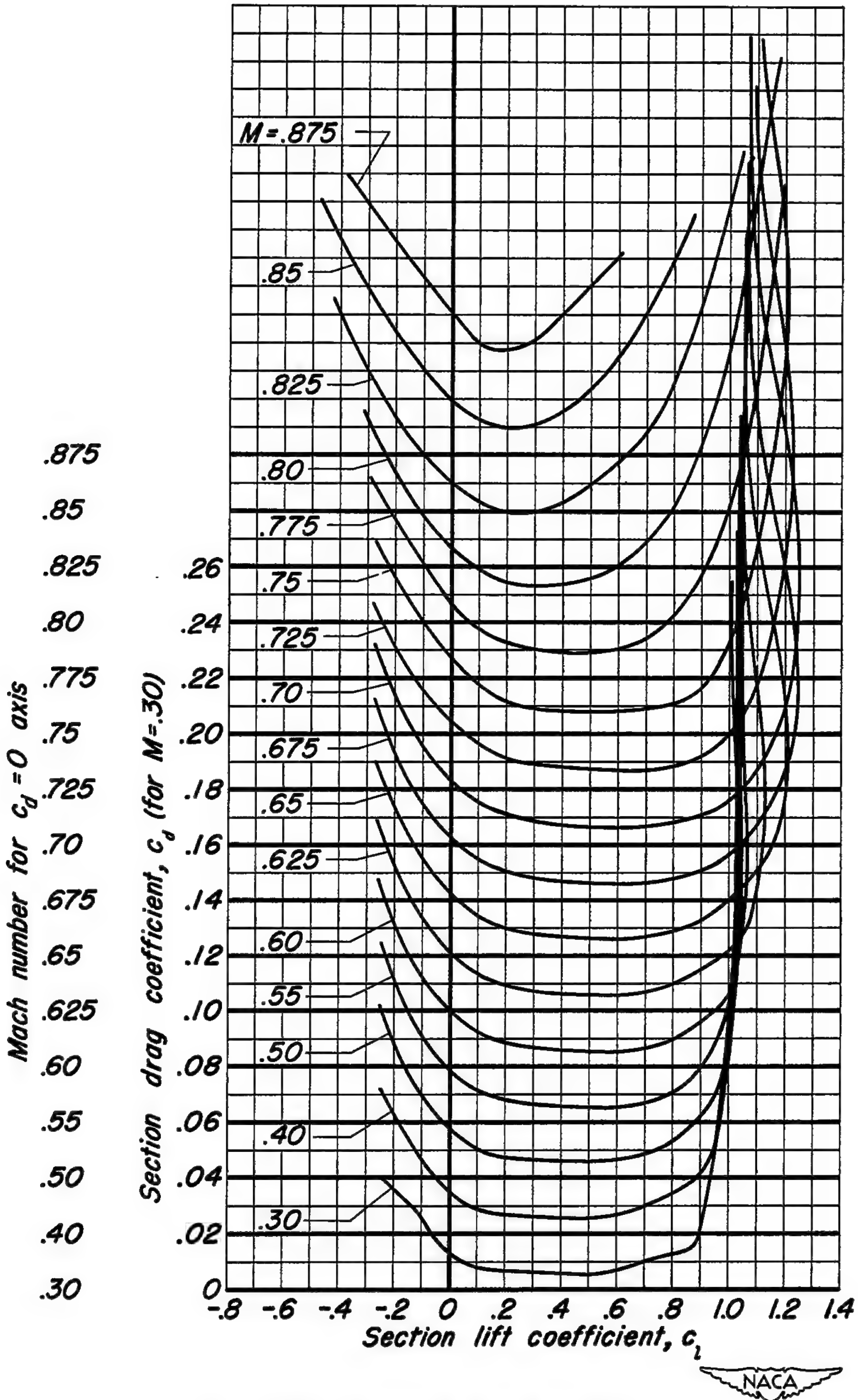
(b) NACA 64A410 airfoil section.

Figure 10.- Continued.



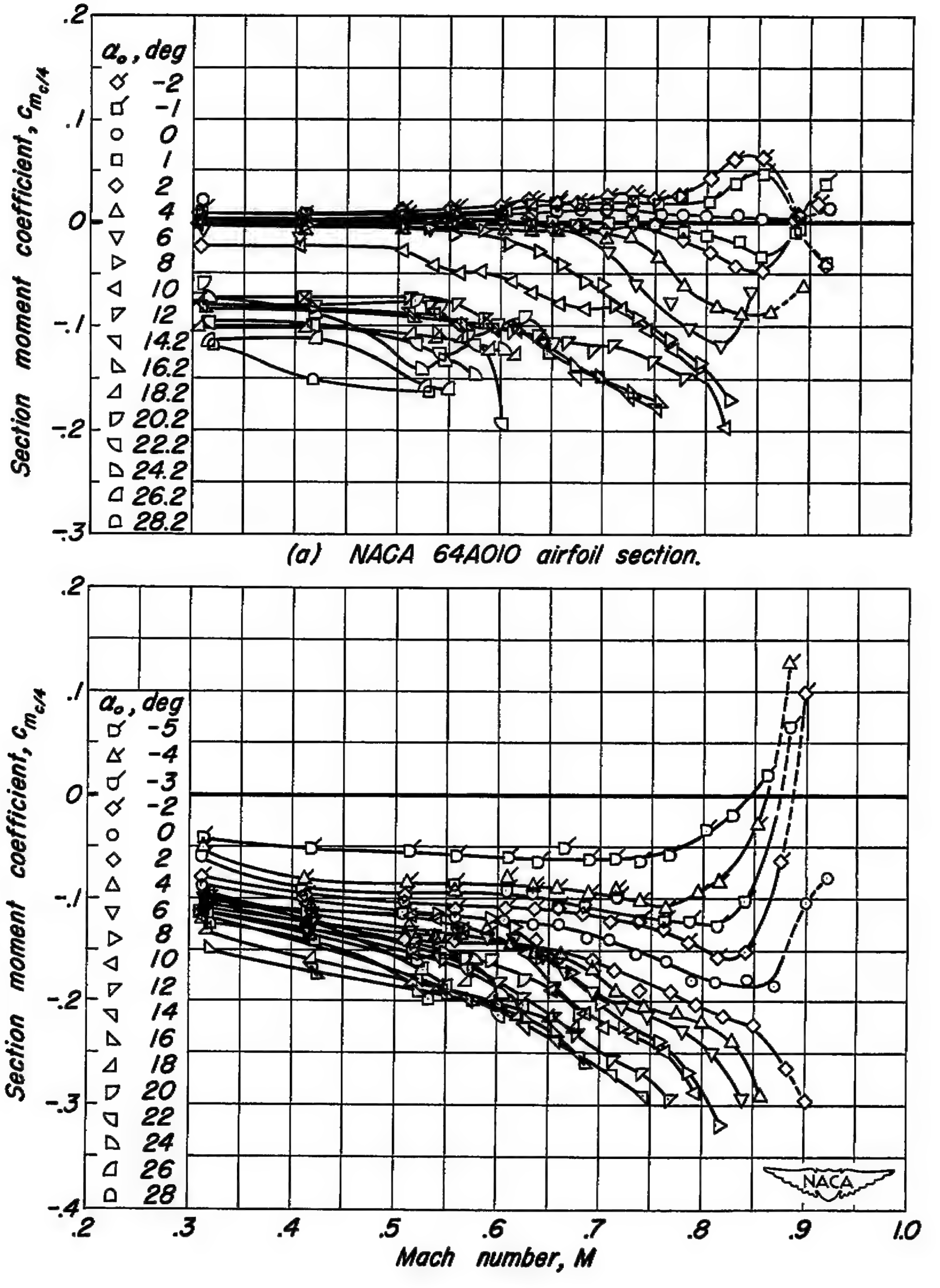
(c) NACA 64A006 airfoil section.

Figure 10.– Continued.



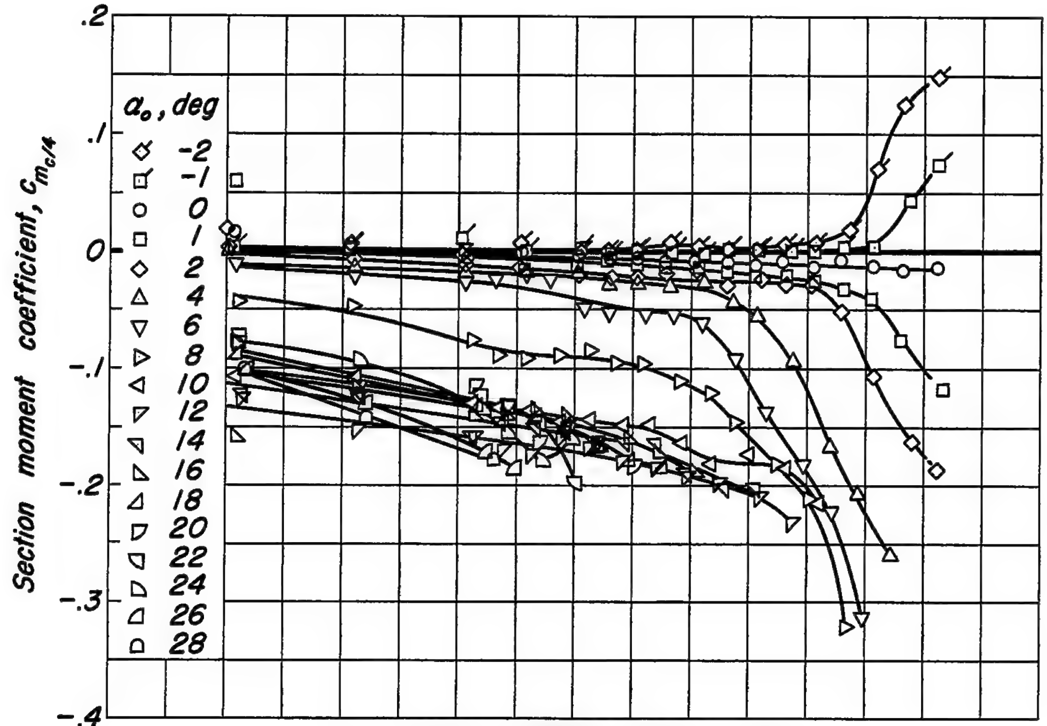
(d) NACA 64A406 airfoil section.

Figure 10.- Concluded.

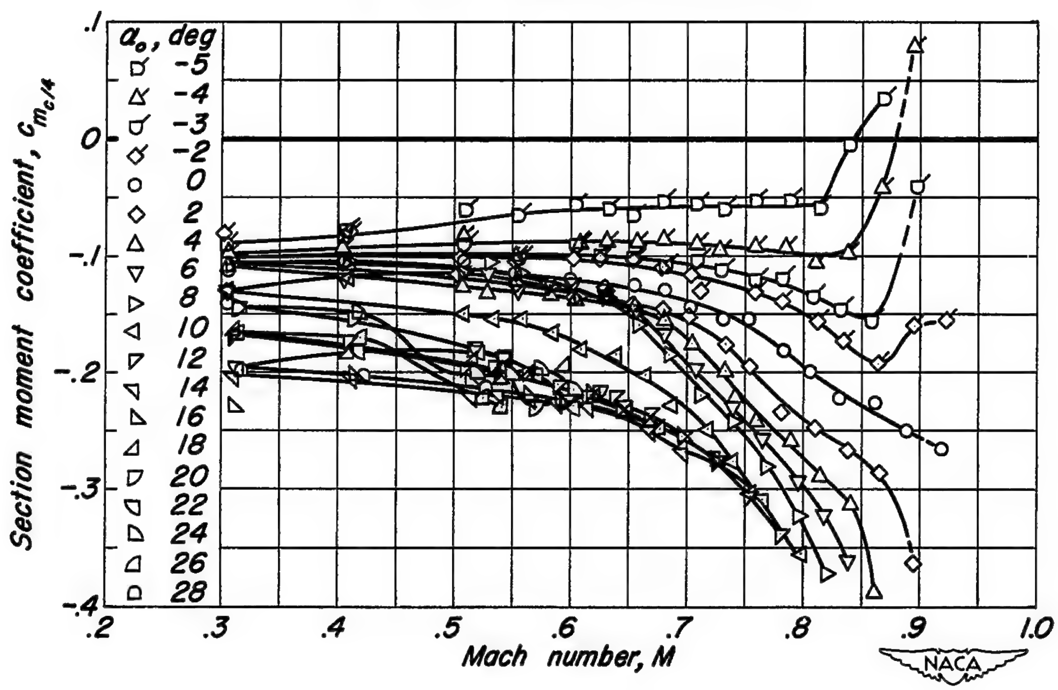


(b) NACA 64A410 airfoil section.

Figure 11.–Variation of section moment coefficient with Mach number at constant section angle of attack.

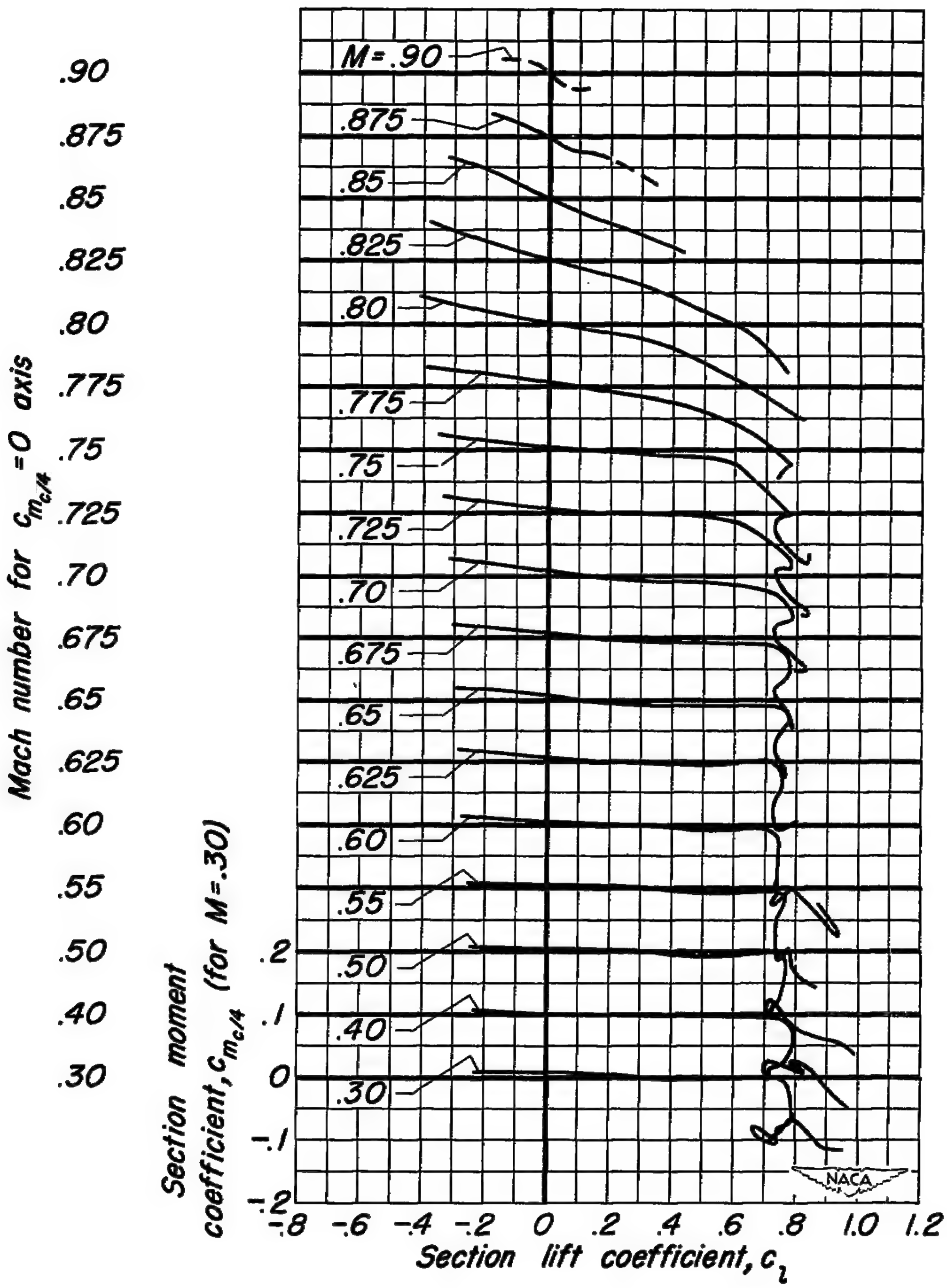


(c) NACA 64A006 airfoil section.



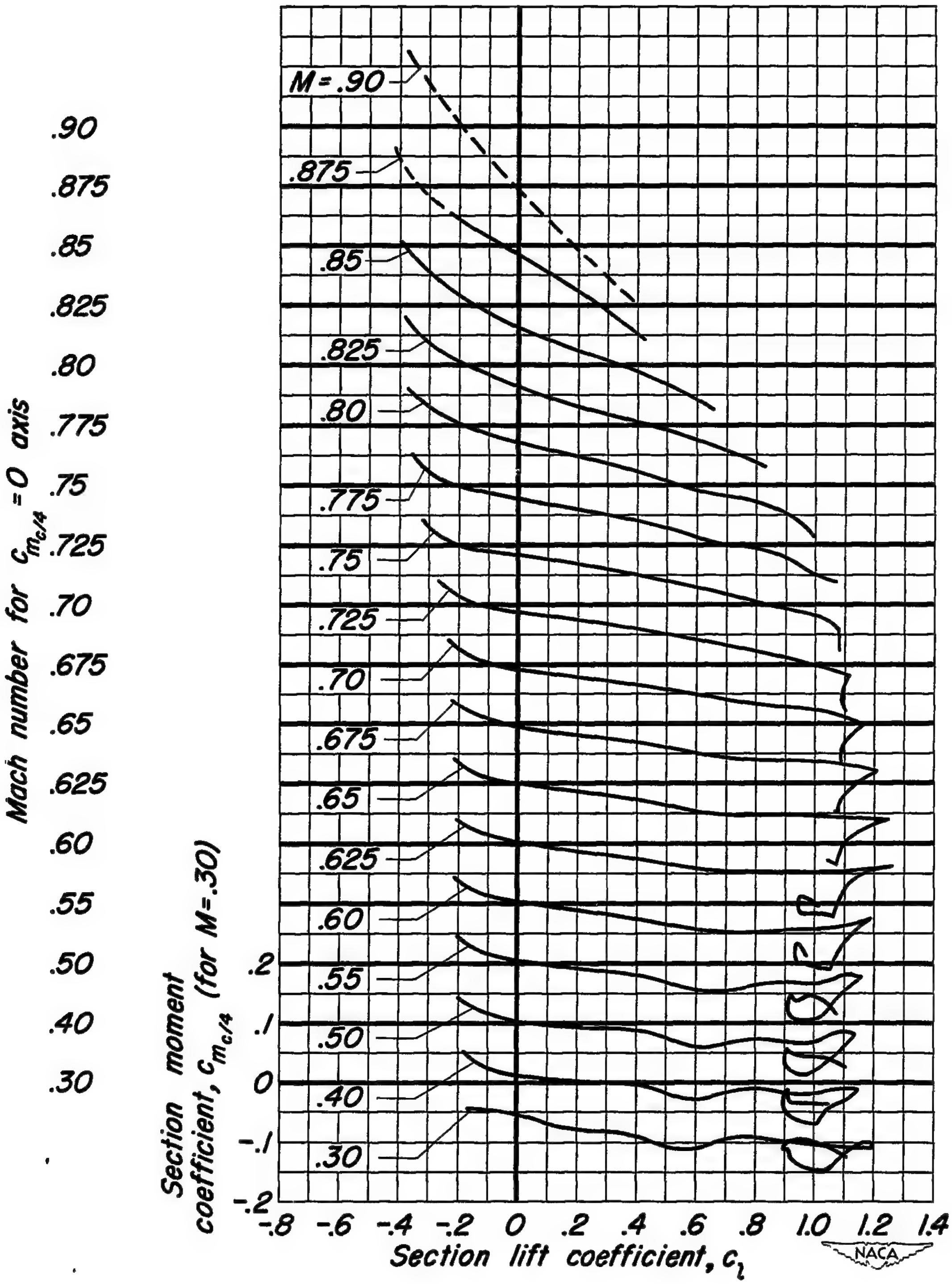
(d) NACA 64A406 airfoil section.

Figure 11. - Concluded.



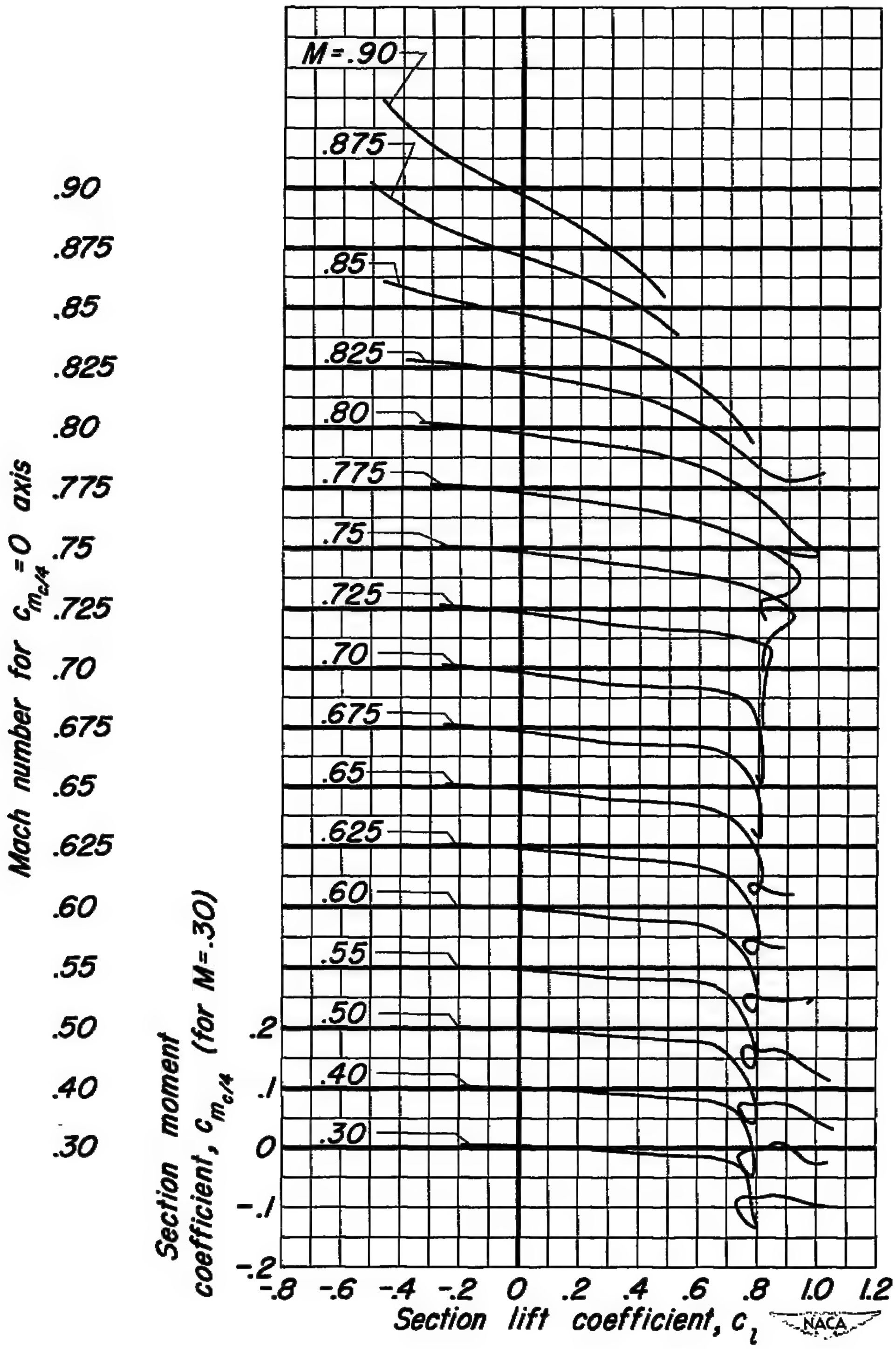
(a) NACA 64A010 airfoil section.

Figure 12.-Variation of section moment coefficient with section lift coefficient at constant Mach number.



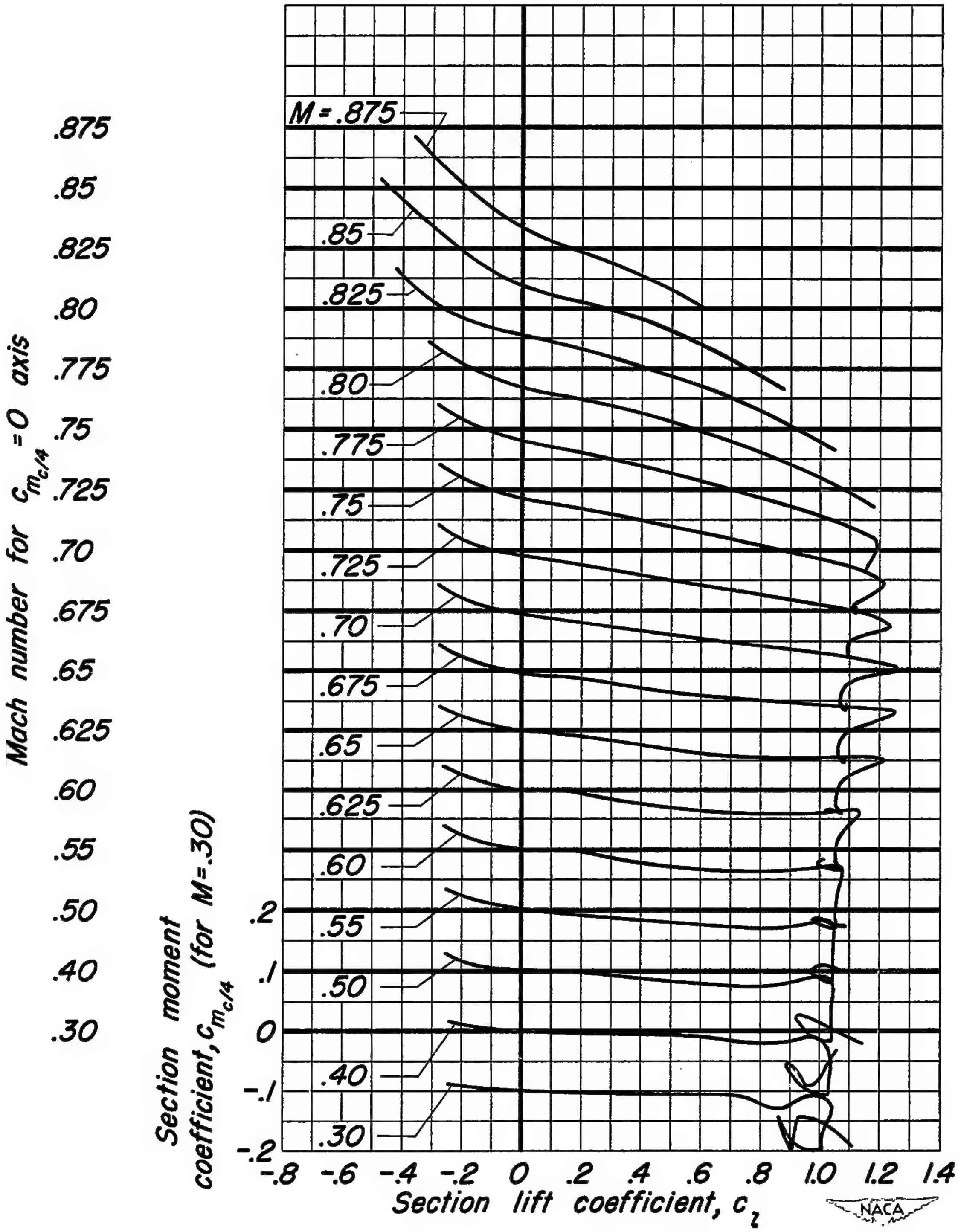
(b) NACA 64A410 airfoil section.

Figure 12.- Continued.



(c) NACA 64A006 airfoil section.

Figure 12.-Continued.



(d) NACA 64A406 airfoil section.

Figure 12.- Concluded.

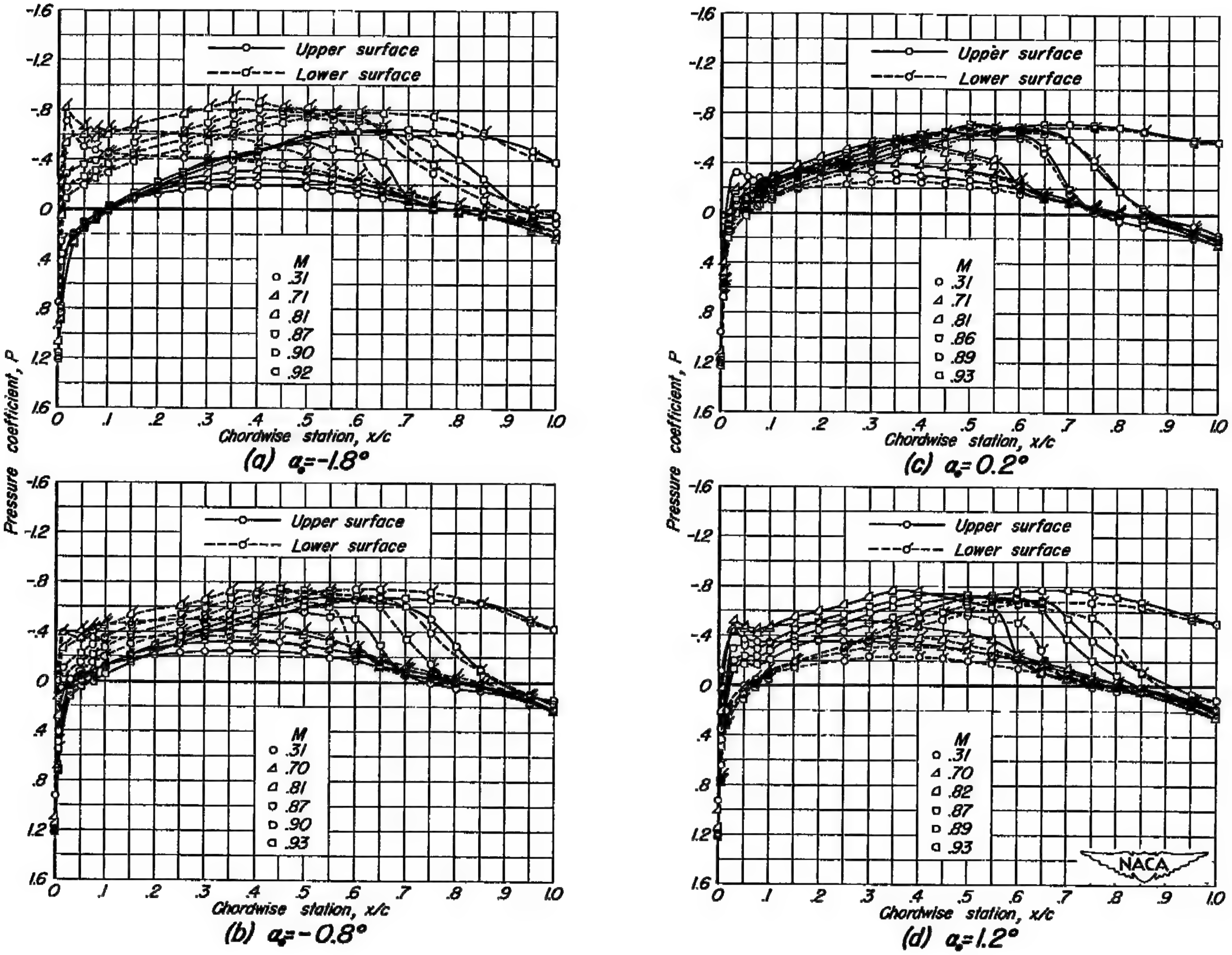


Figure 13.- Effect of Mach number on the pressure distribution over the NACA 64A010 airfoil section at constant section angle of attack.

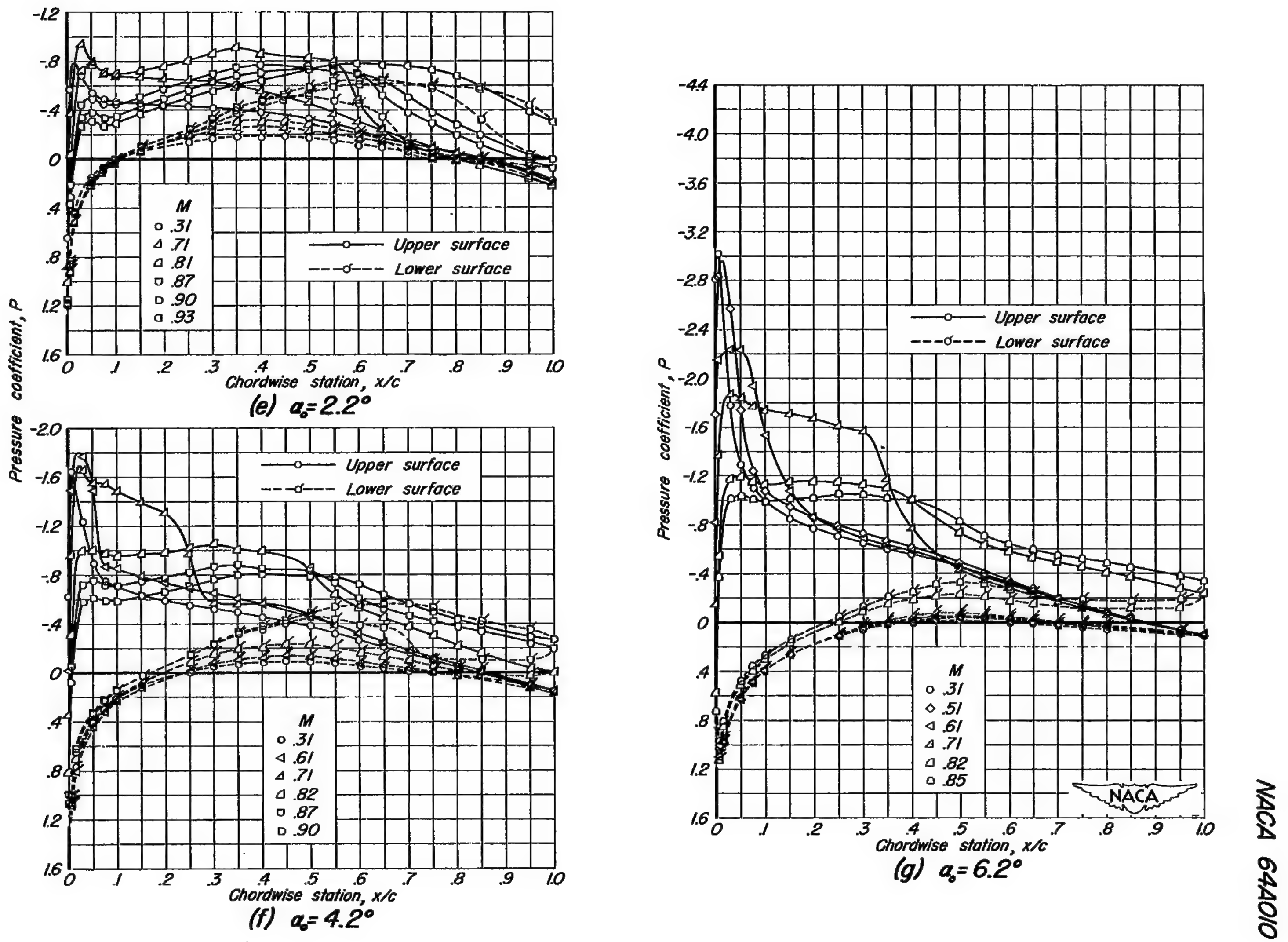


Figure 13.- Continued.

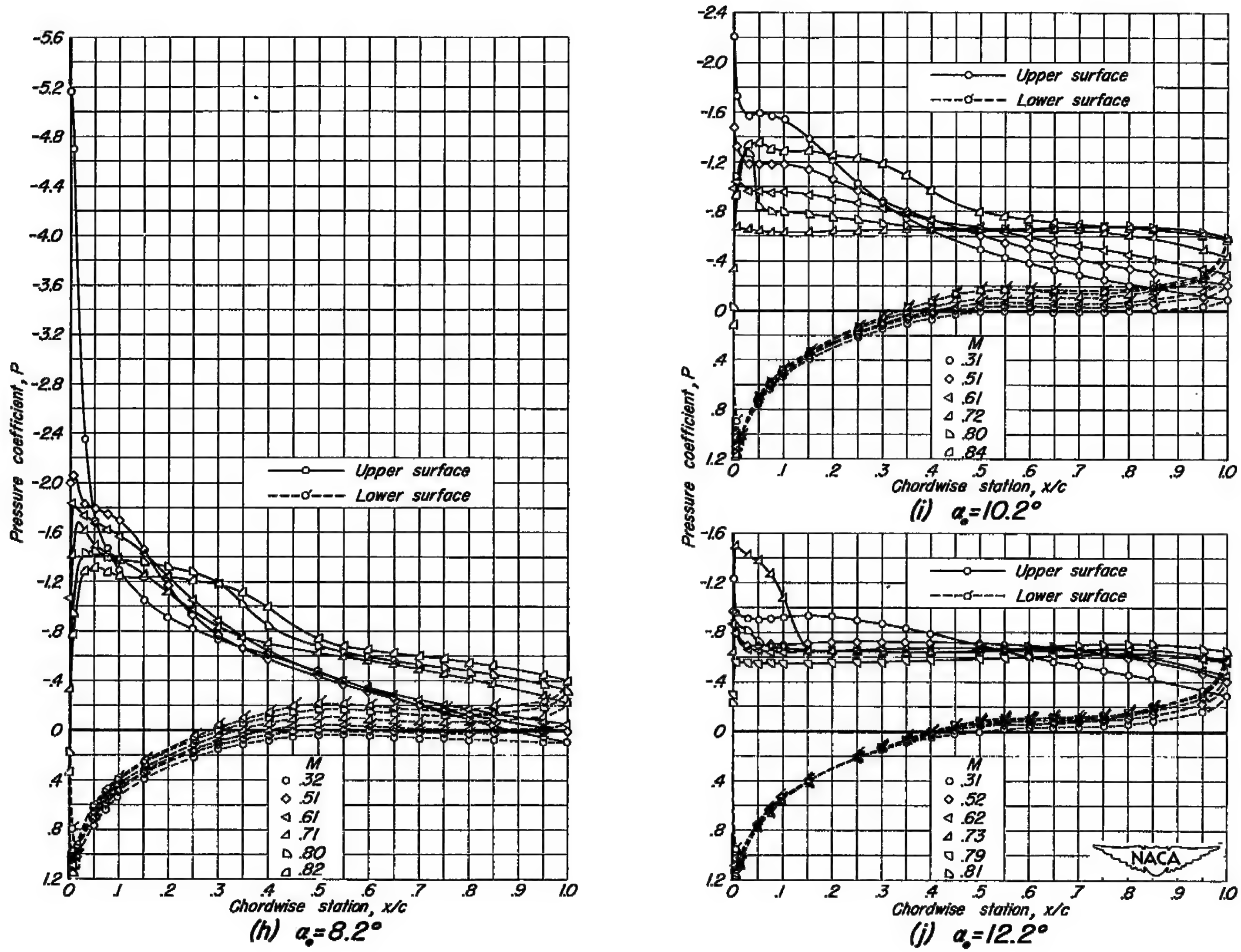


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Figure 13.- Continued.

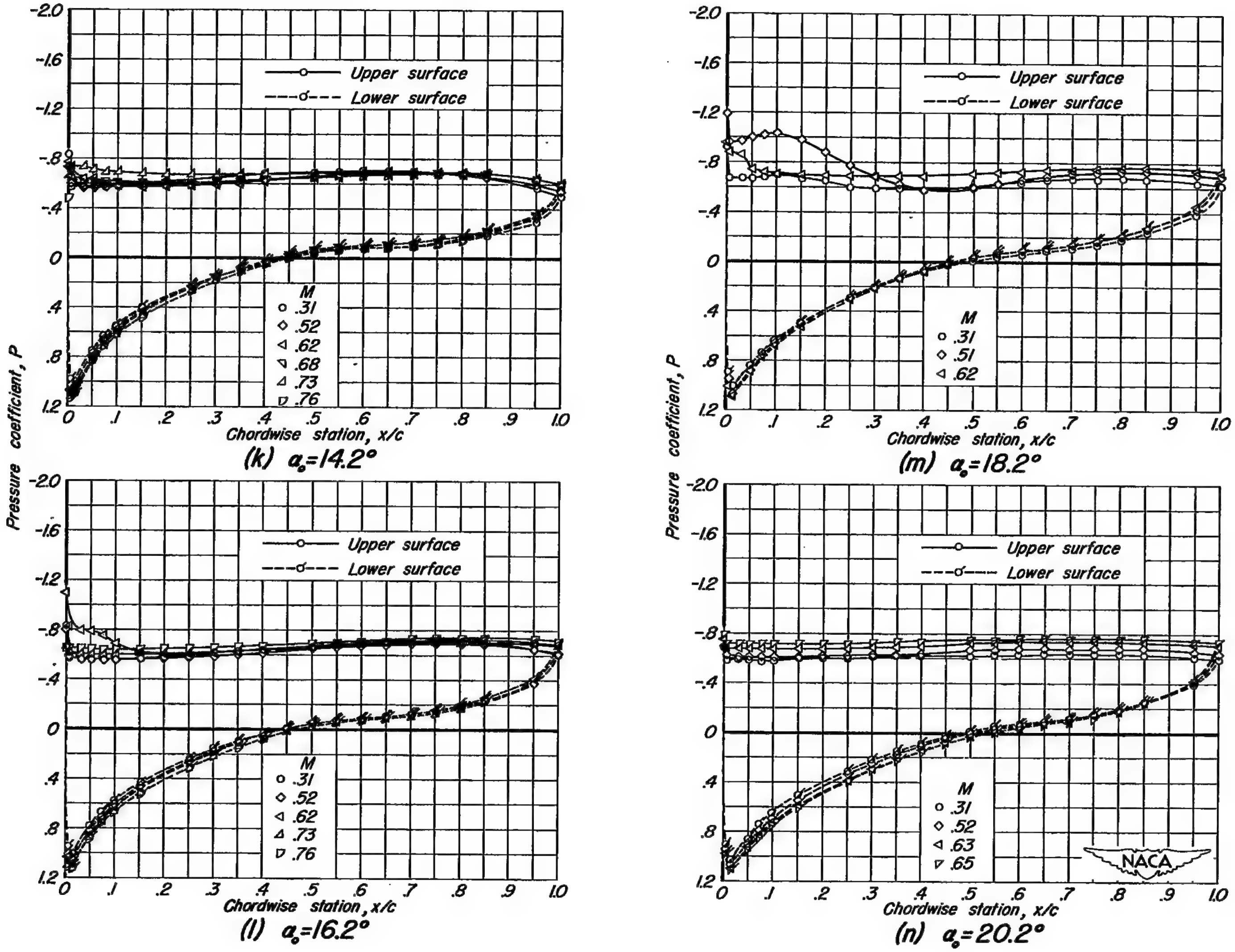


Figure 13.- Continued.

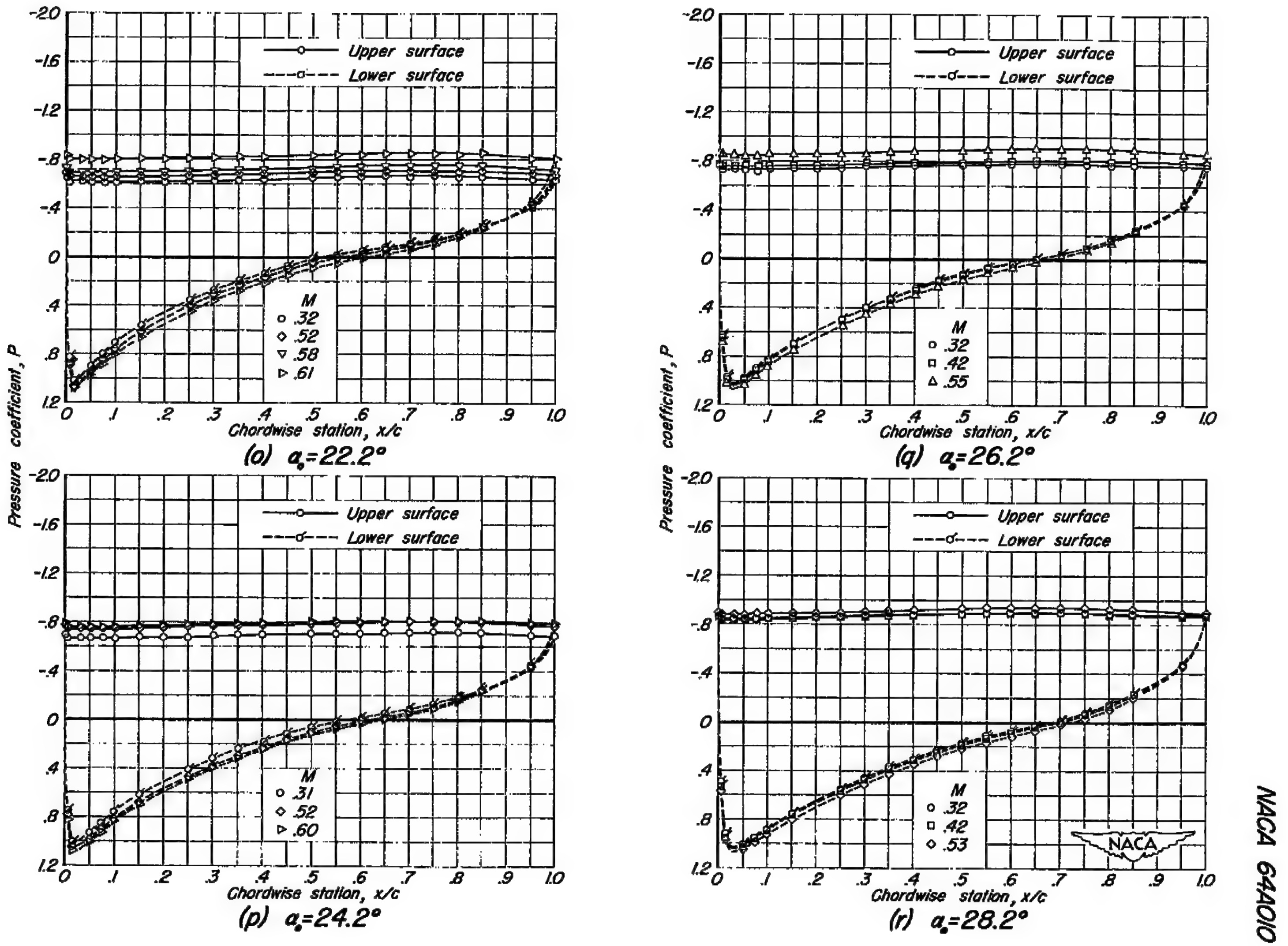
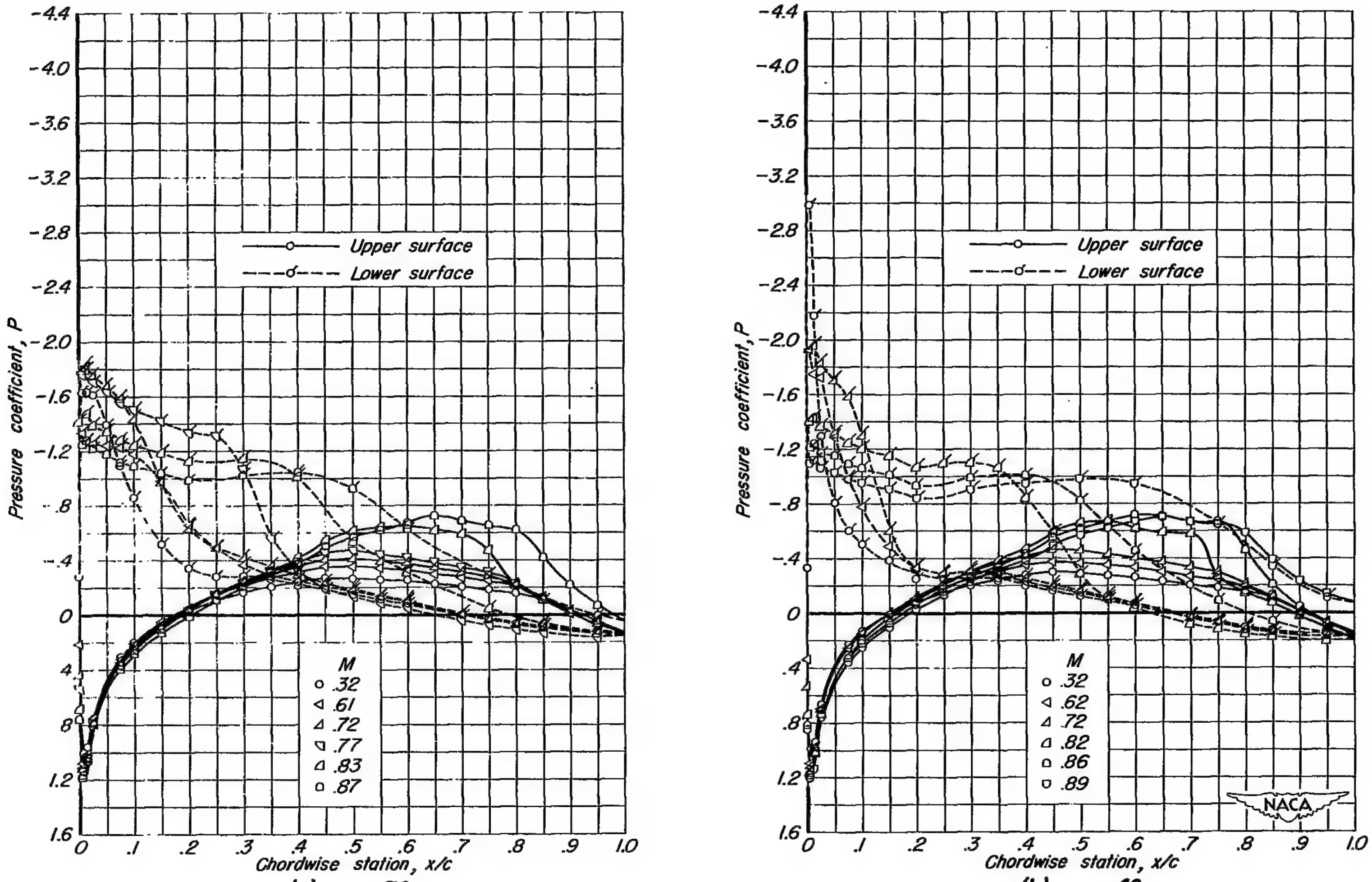


Figure 13.- Concluded.

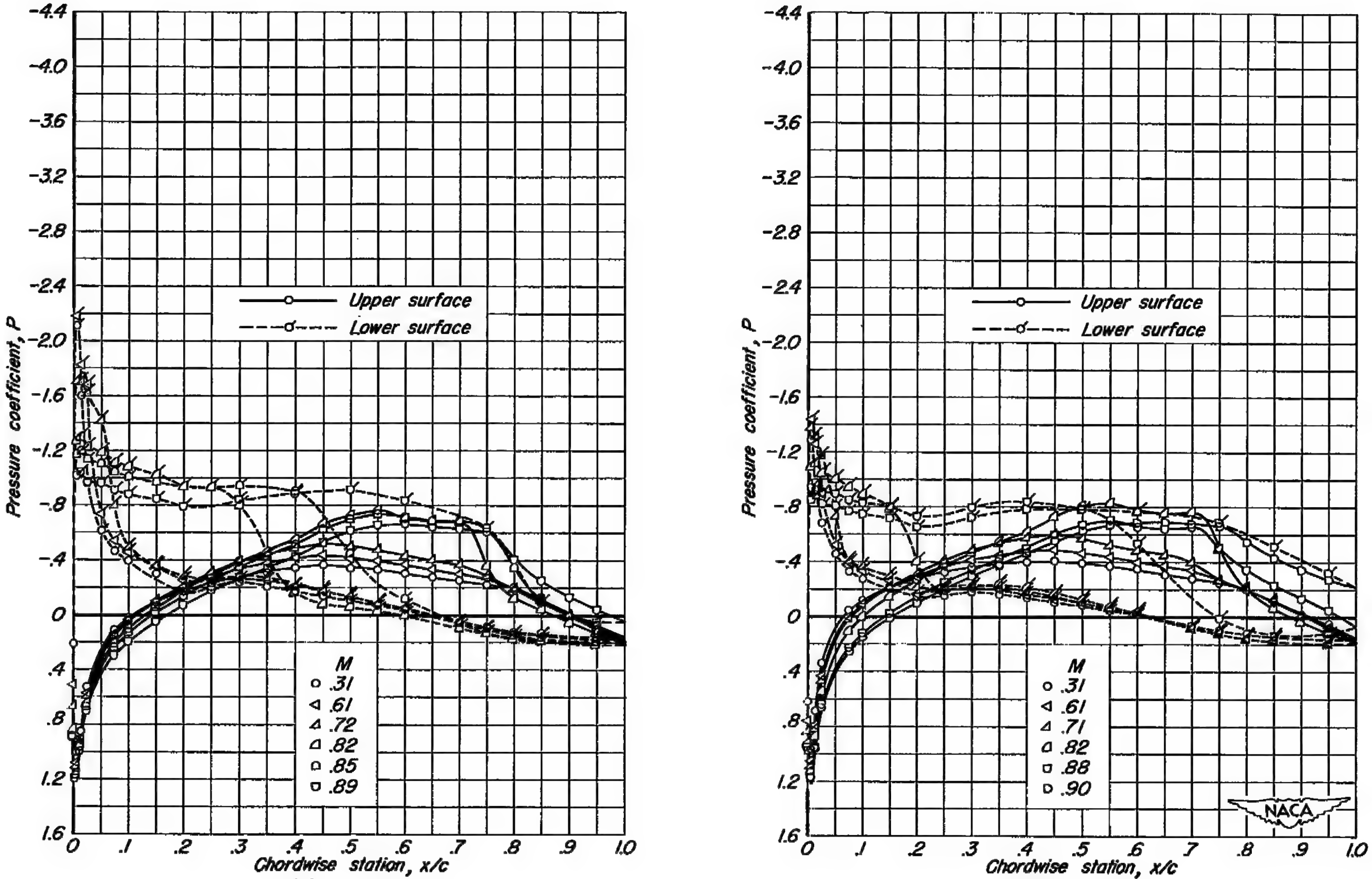


(a) $a_o = -5°$ (b) $a_o = -4°$

Figure 14.- Effect of Mach number on the pressure distribution over the NACA 64A410 airfoil section at constant section angle of attack.

NACA 64A410

NACA 64A410



(c) $\alpha_o = -3°$

(d) $\alpha_o = -2°$

Figure 14.- Continued.

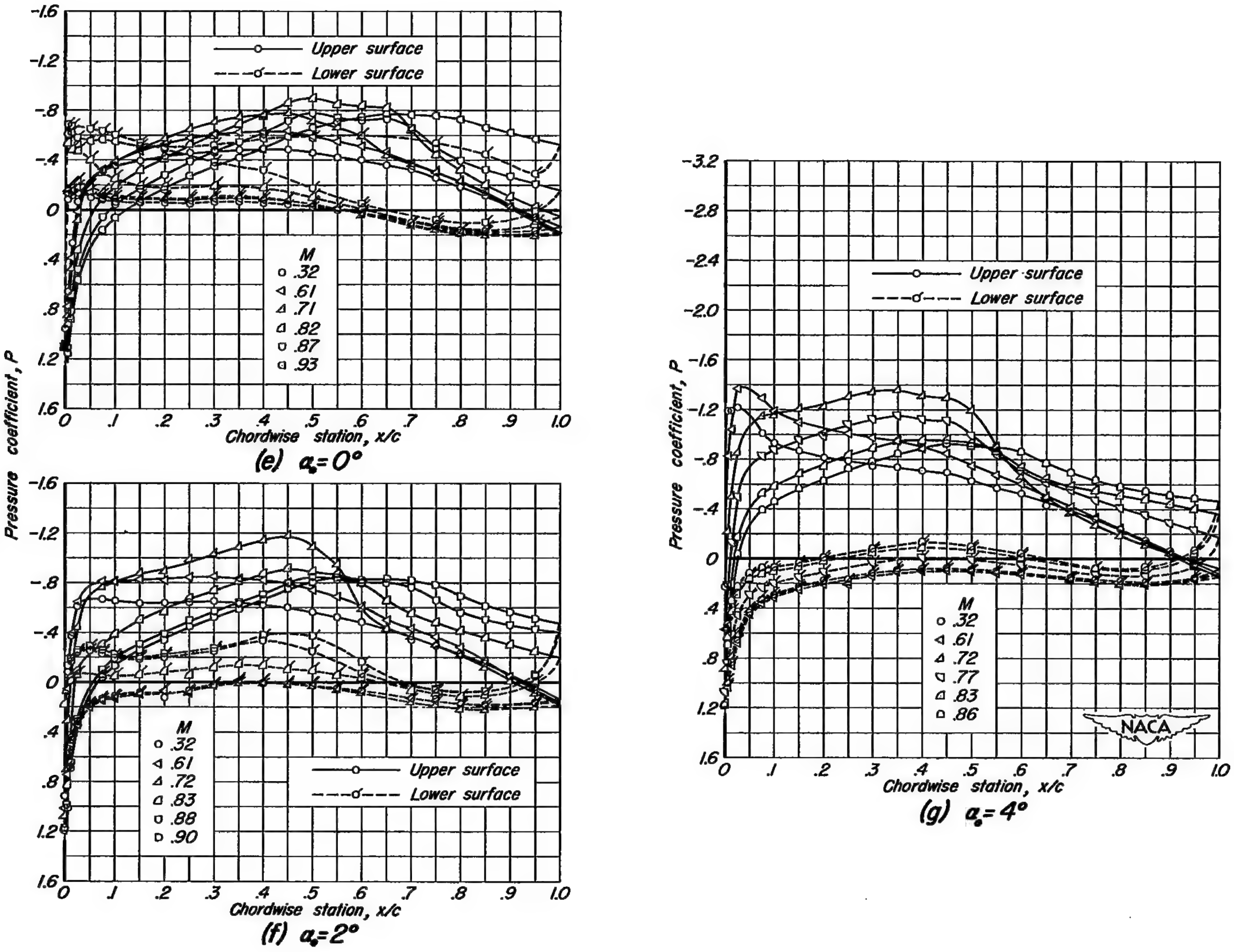


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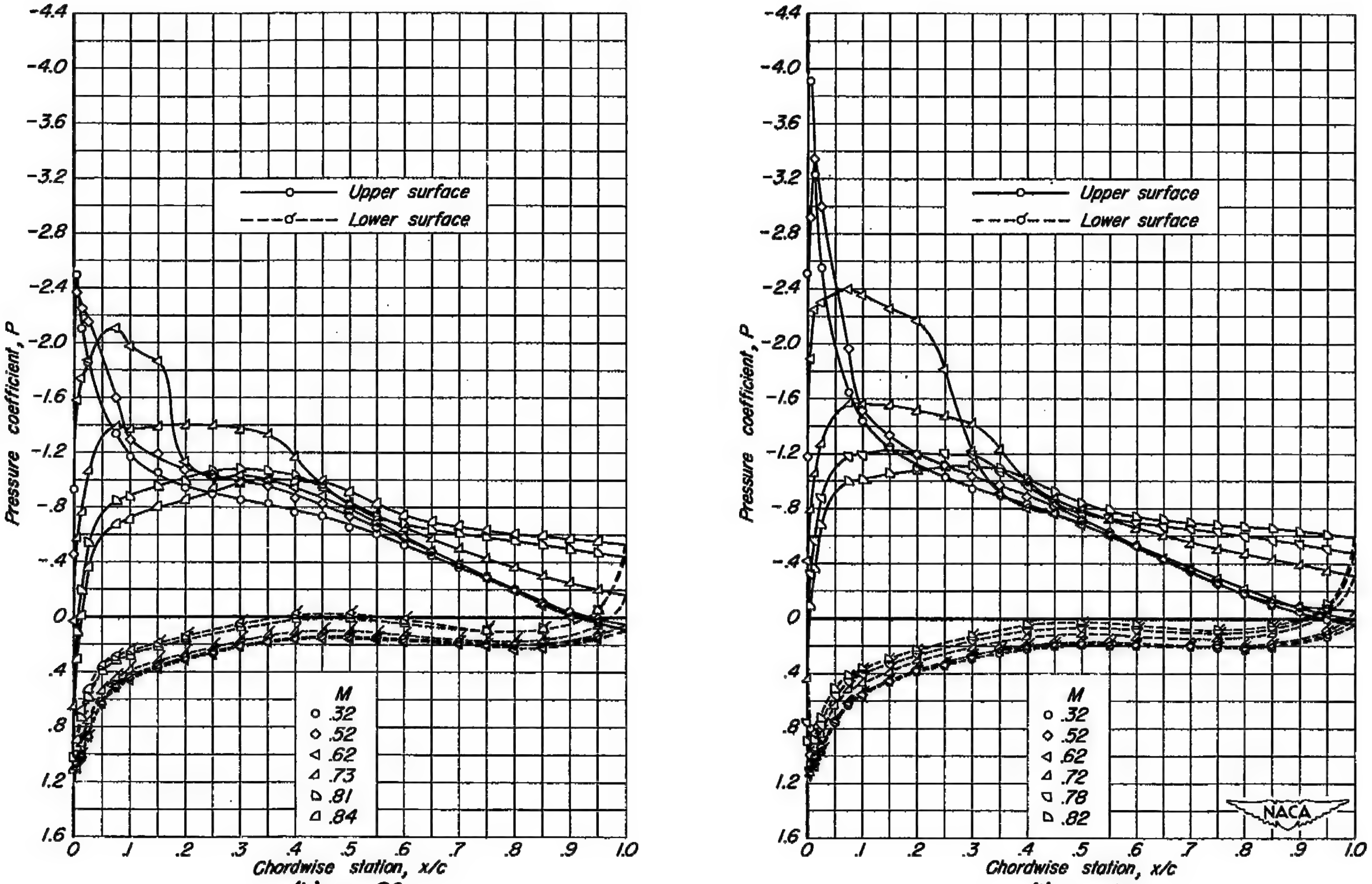
Figure 14.- Continued.



(h) $\alpha_o = 6°$

(i) $\alpha_o = 8°$

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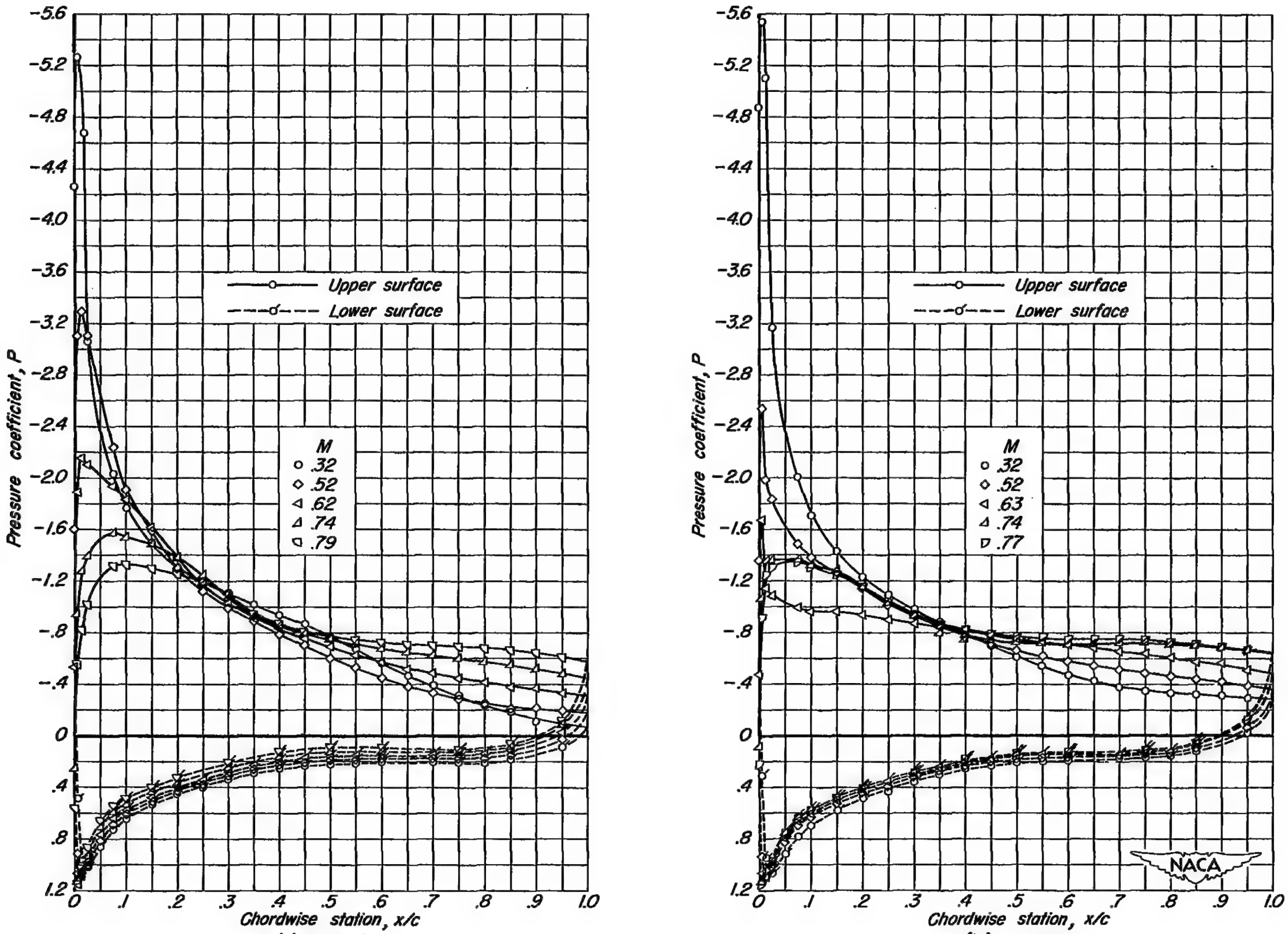
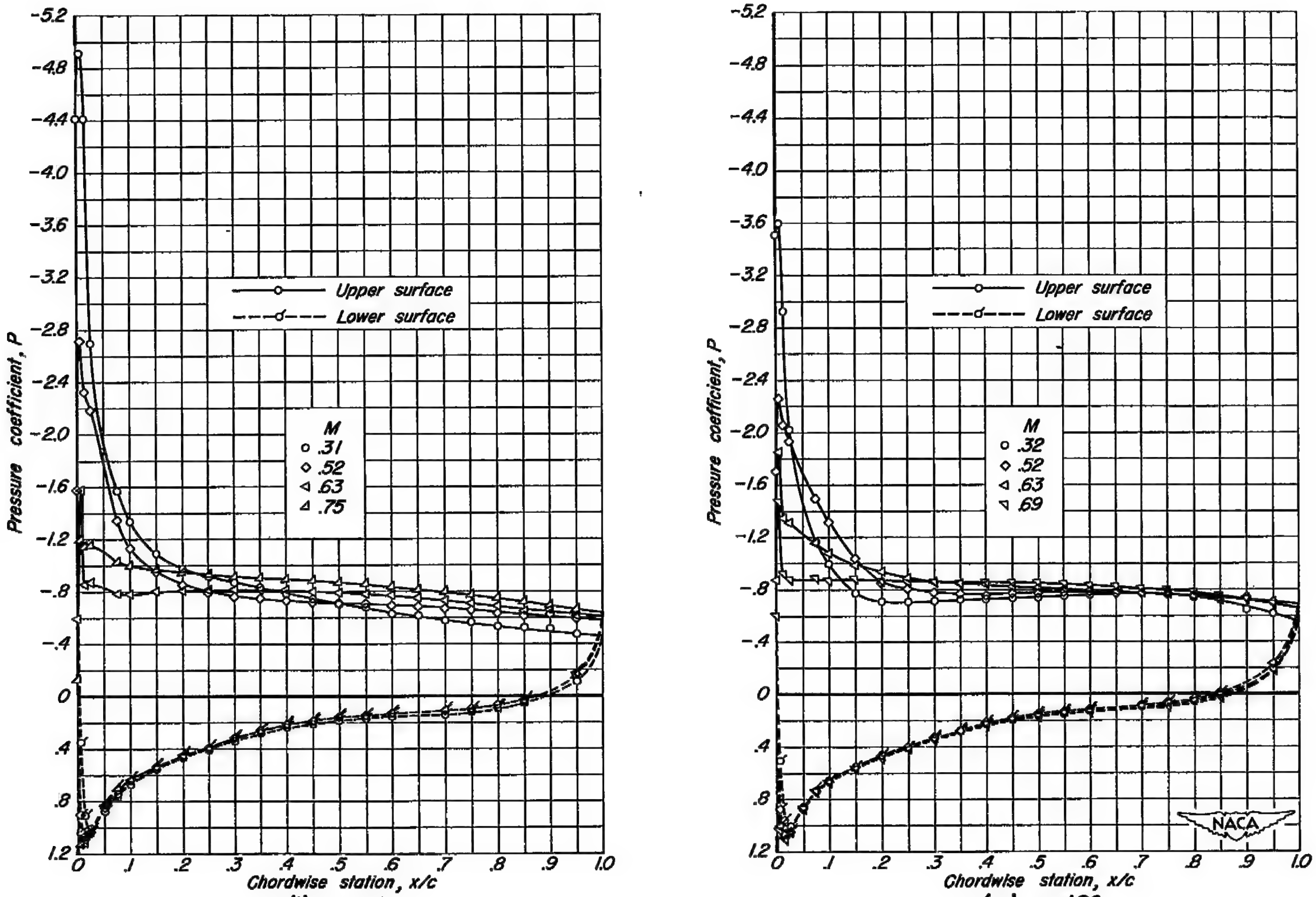
Figure 14.- Continued.



(j) $\alpha_o = 10°$ (k) $\alpha_o = 12°$

Figure 14.- Continued.

NACA 64A410



(l) $\alpha_o = 14°$

(m) $\alpha_o = 16°$

Figure 14.- Continued.

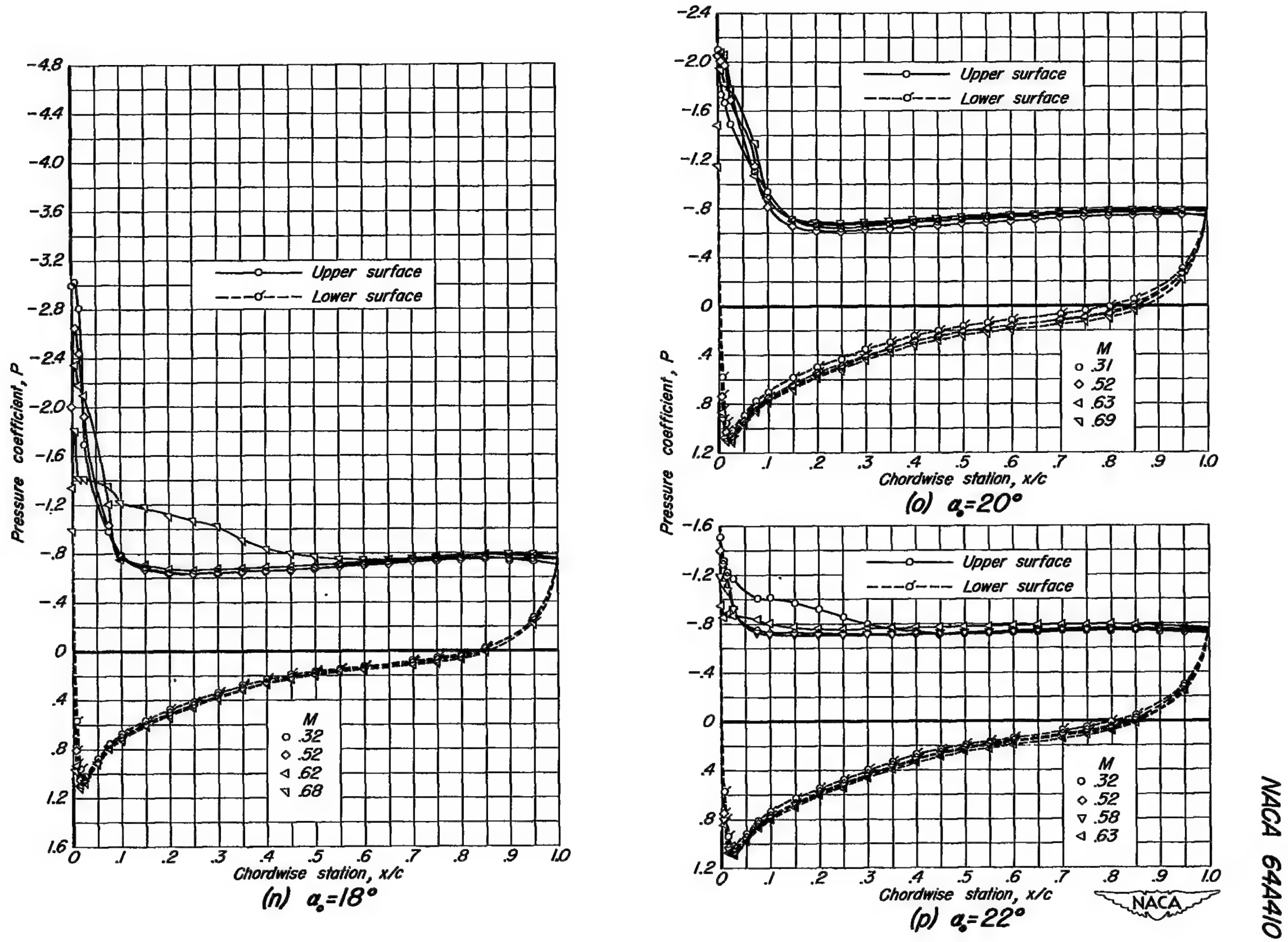
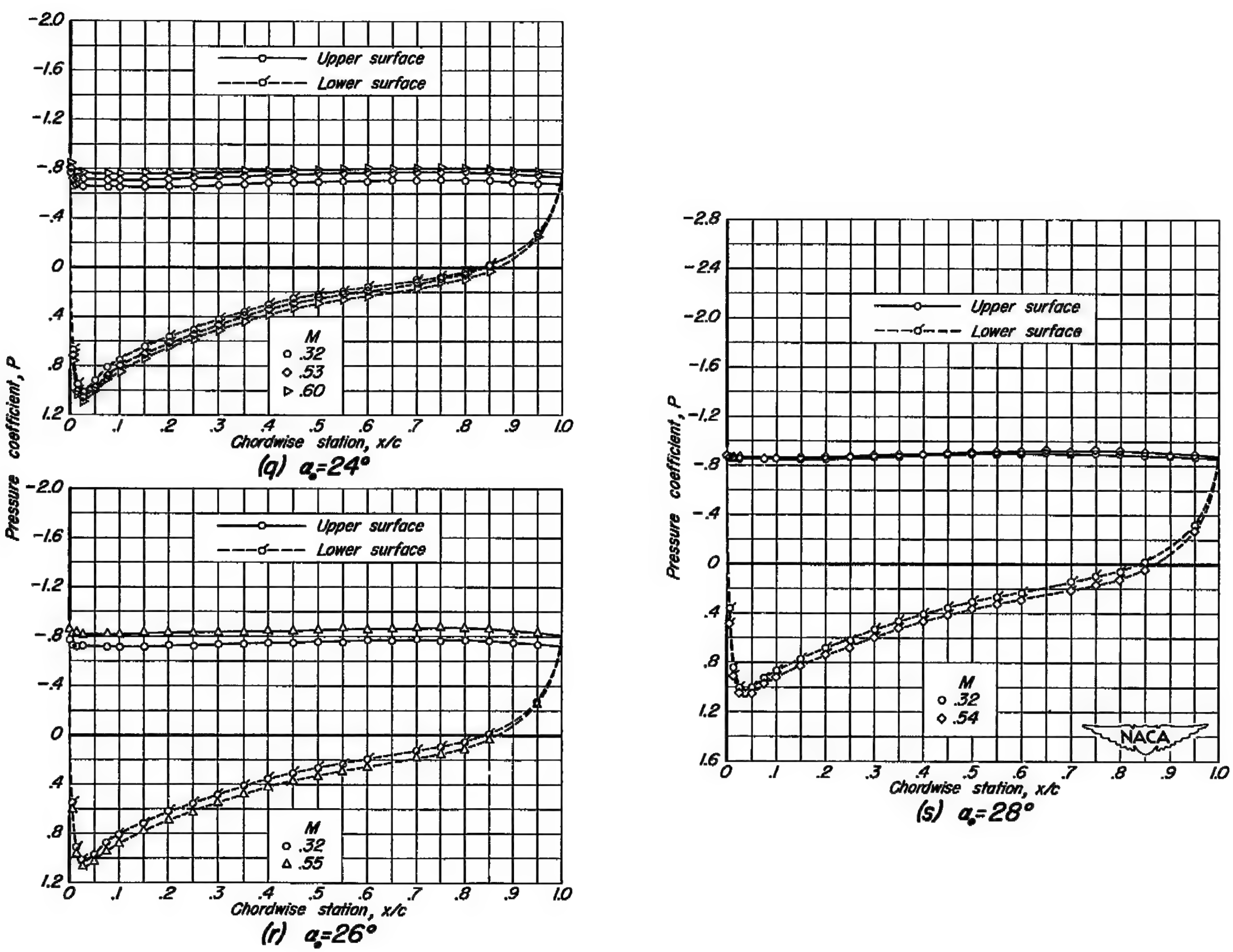
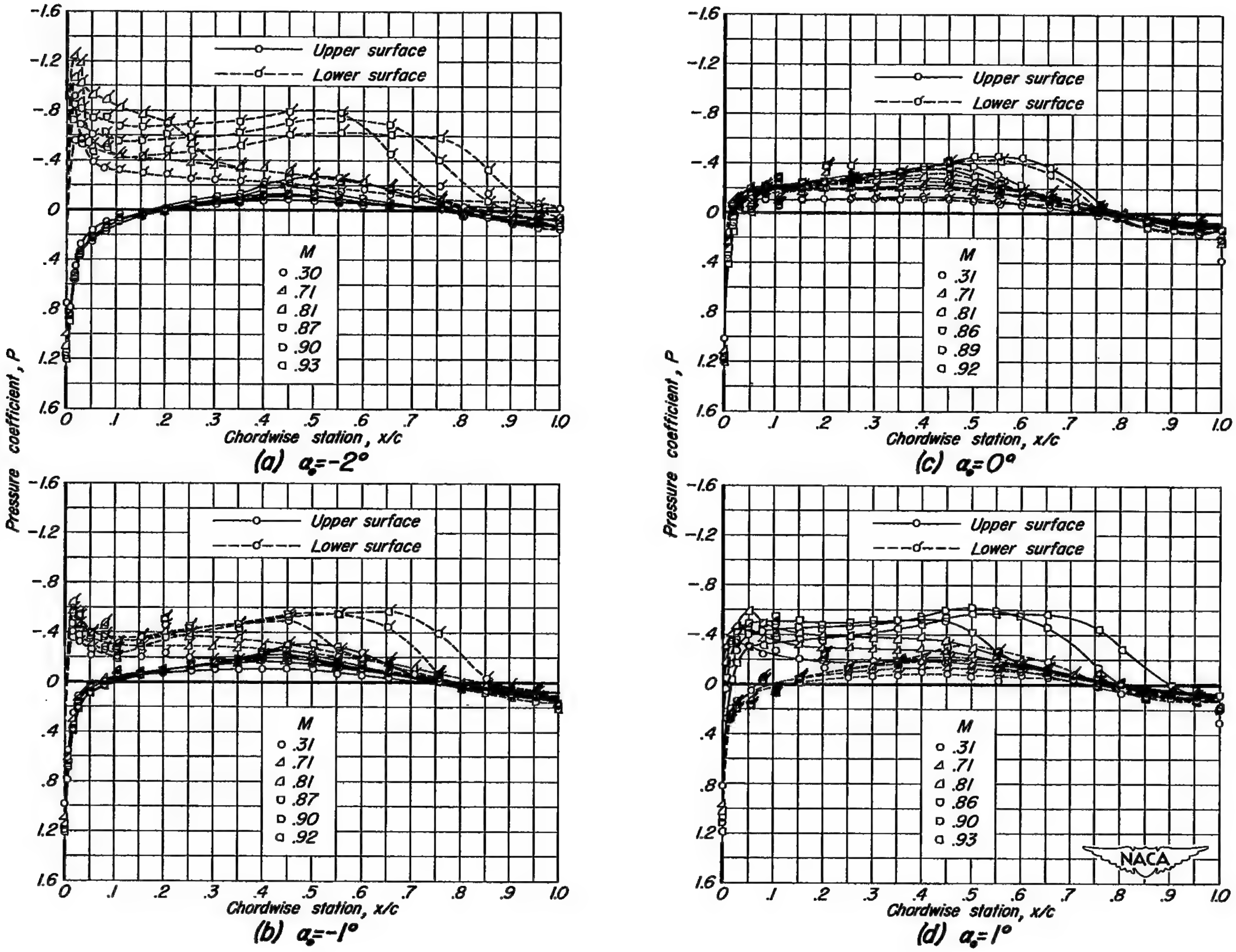


Figure 14.- Continued.



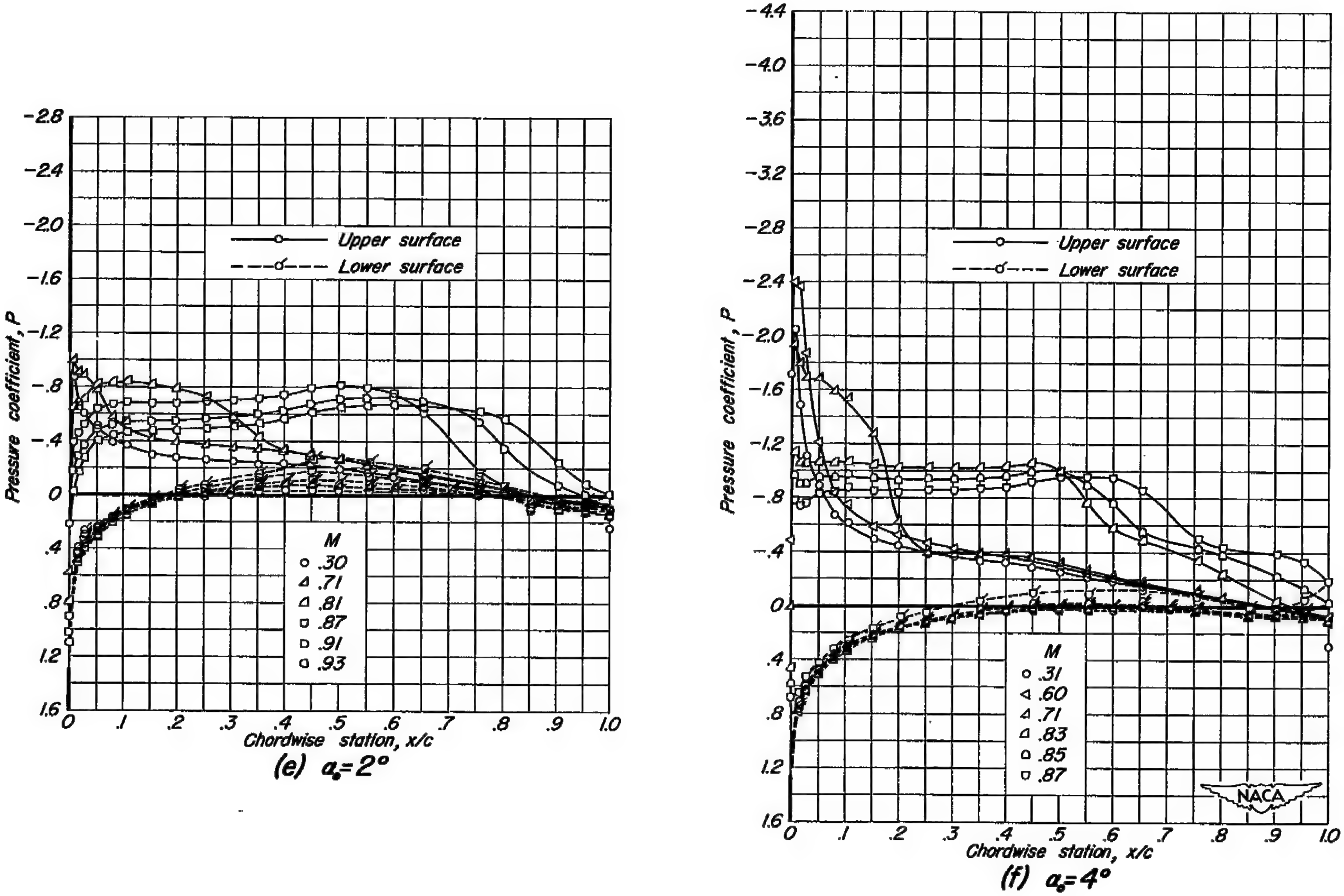
NACA 64A410

Figure 14.- Concluded.



NACA 64A006

Figure 15.- Effect of Mach number on the pressure distribution over the NACA 64A006 airfoil section at constant section angle of attack.



NACA 64A006

Figure 15.- Continued.

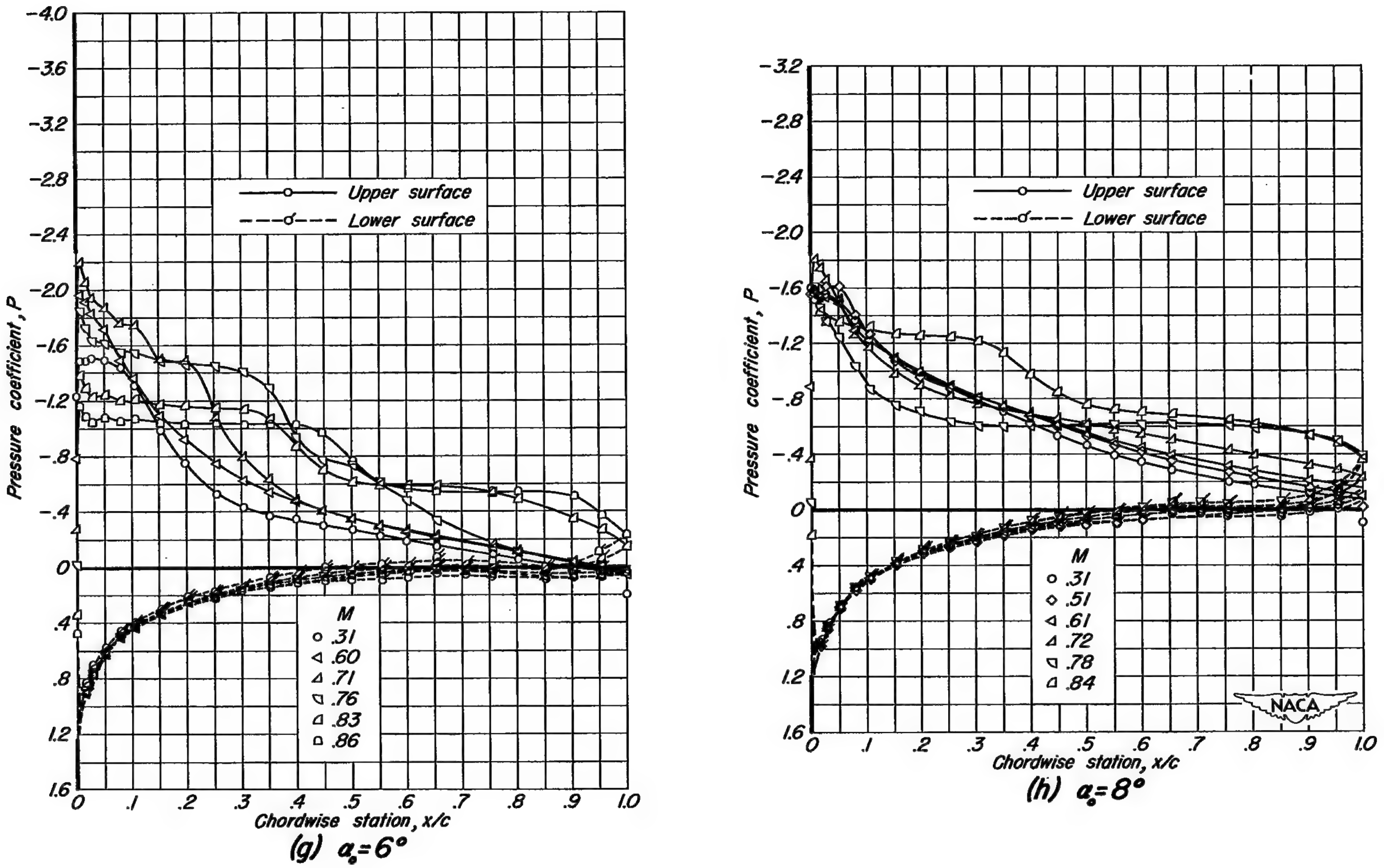


Figure 15.- Continued.

NACA 64A006

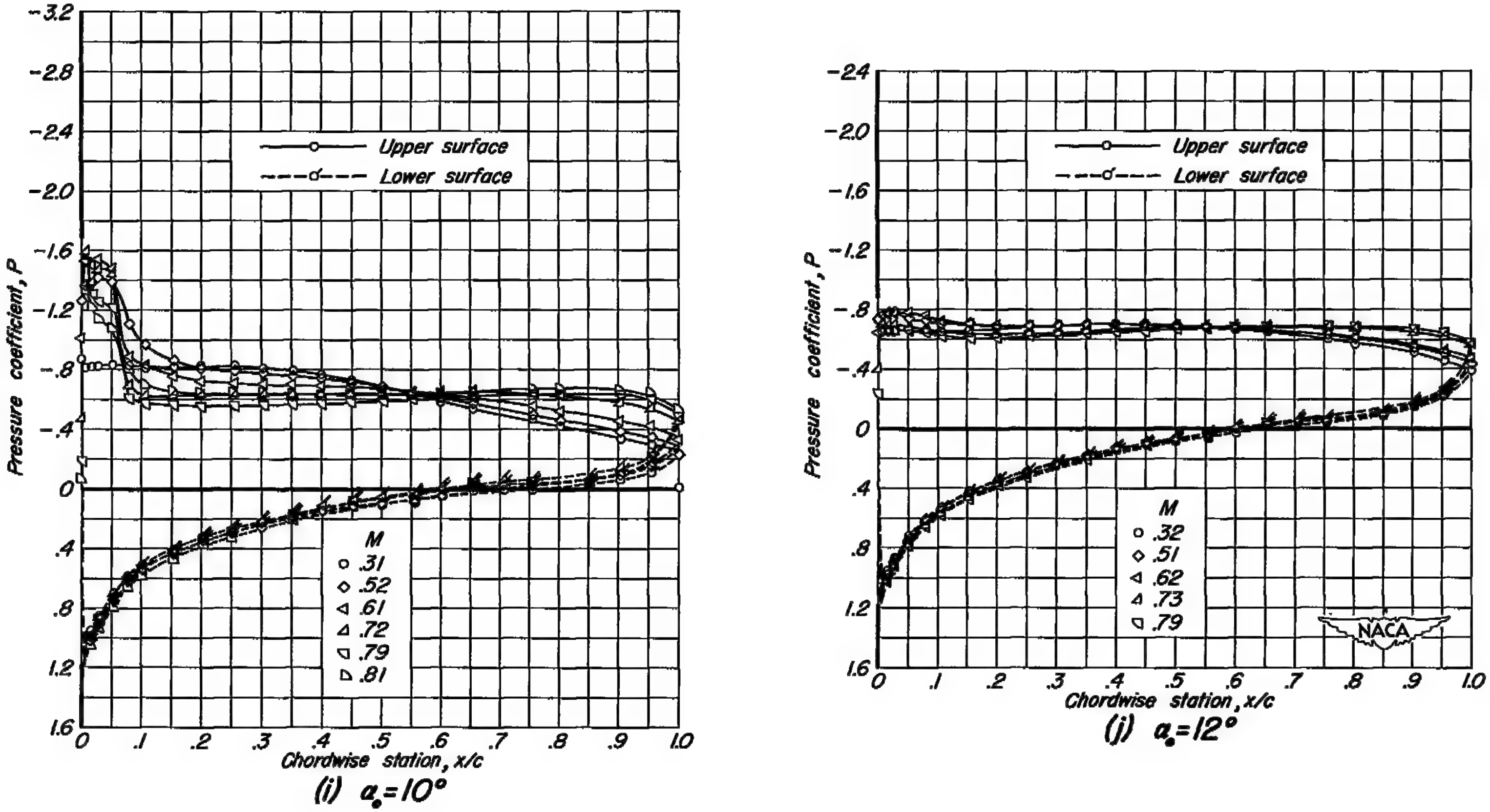
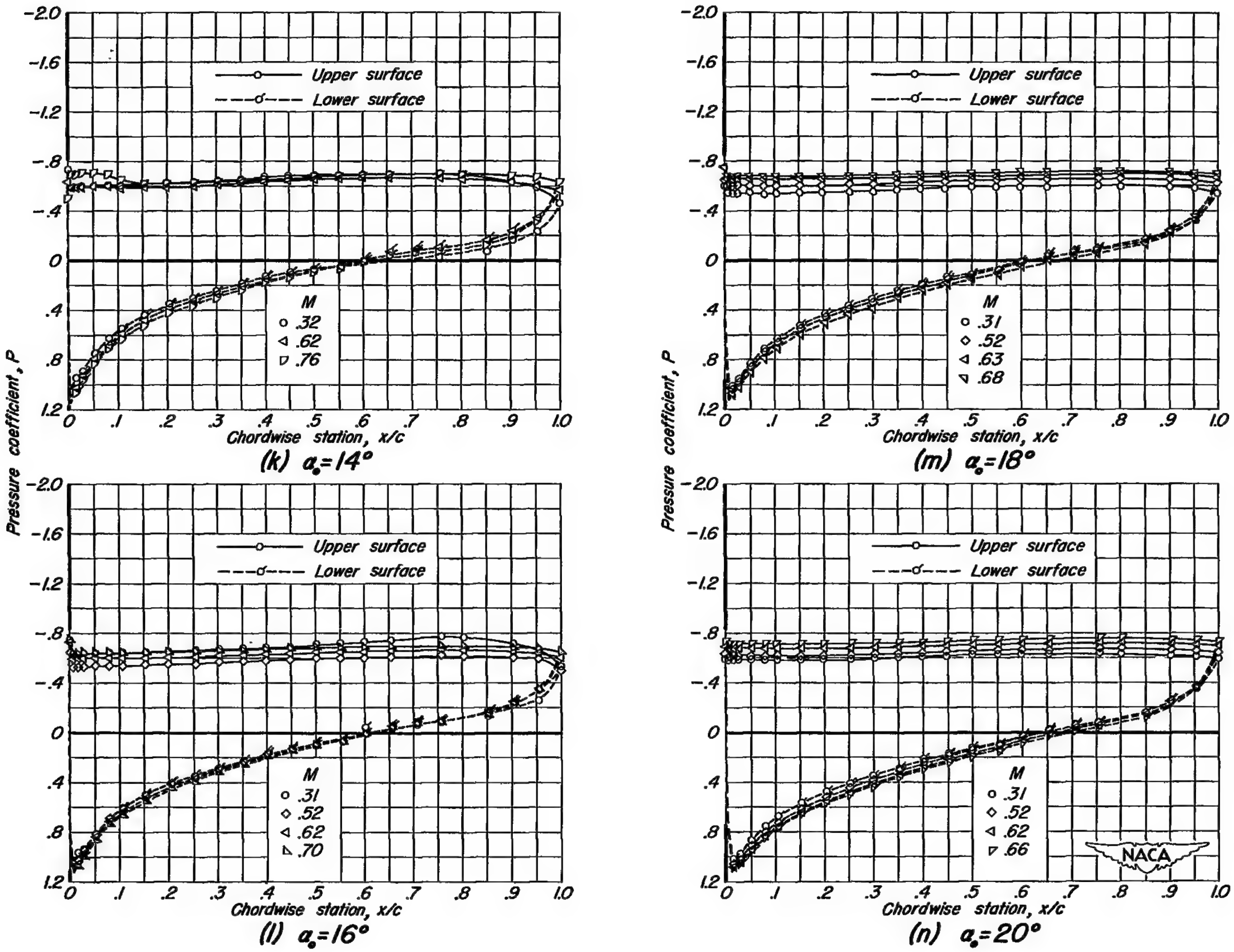


Figure 15.- Continued.



NACA 64A006

Figure 15.- Continued.

NACA 64A006

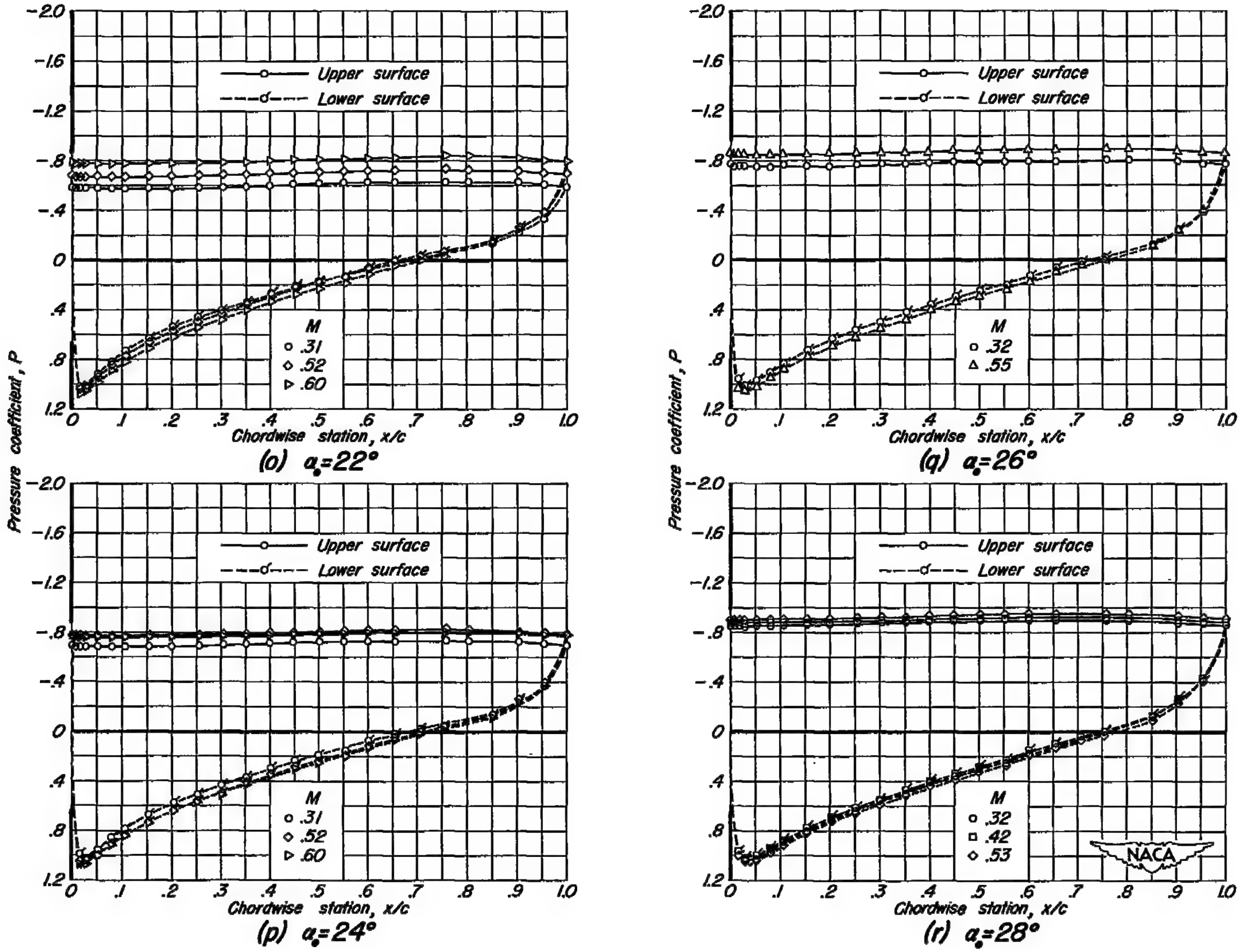
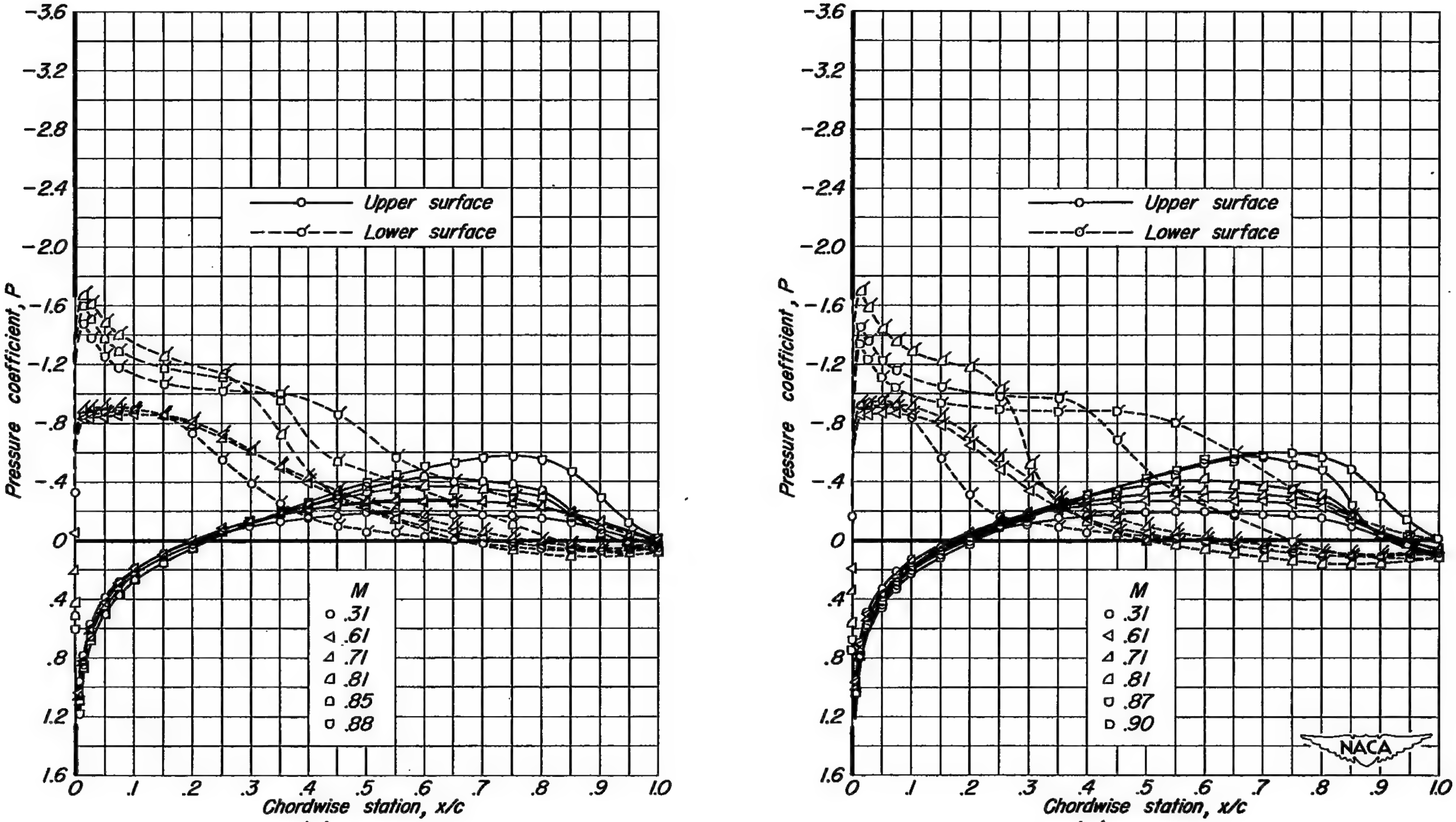


Figure 15.- Concluded.



(a) $\alpha_o = -5°$ (b) $\alpha_o = -4°$

Figure 16.- Effect of Mach number on the pressure distribution over the NACA 64A406 airfoil section at constant section angle of attack.

NACA 64A406

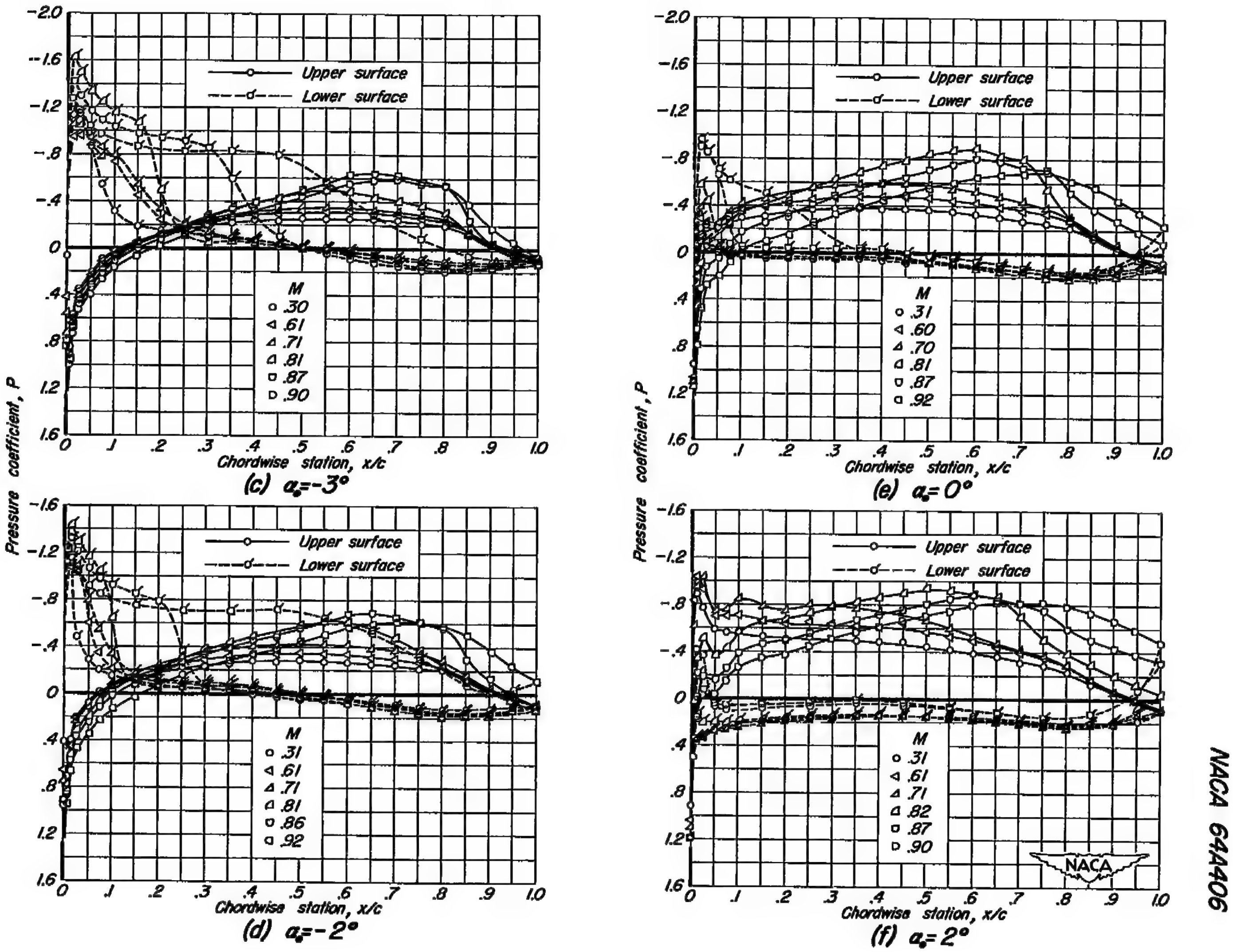
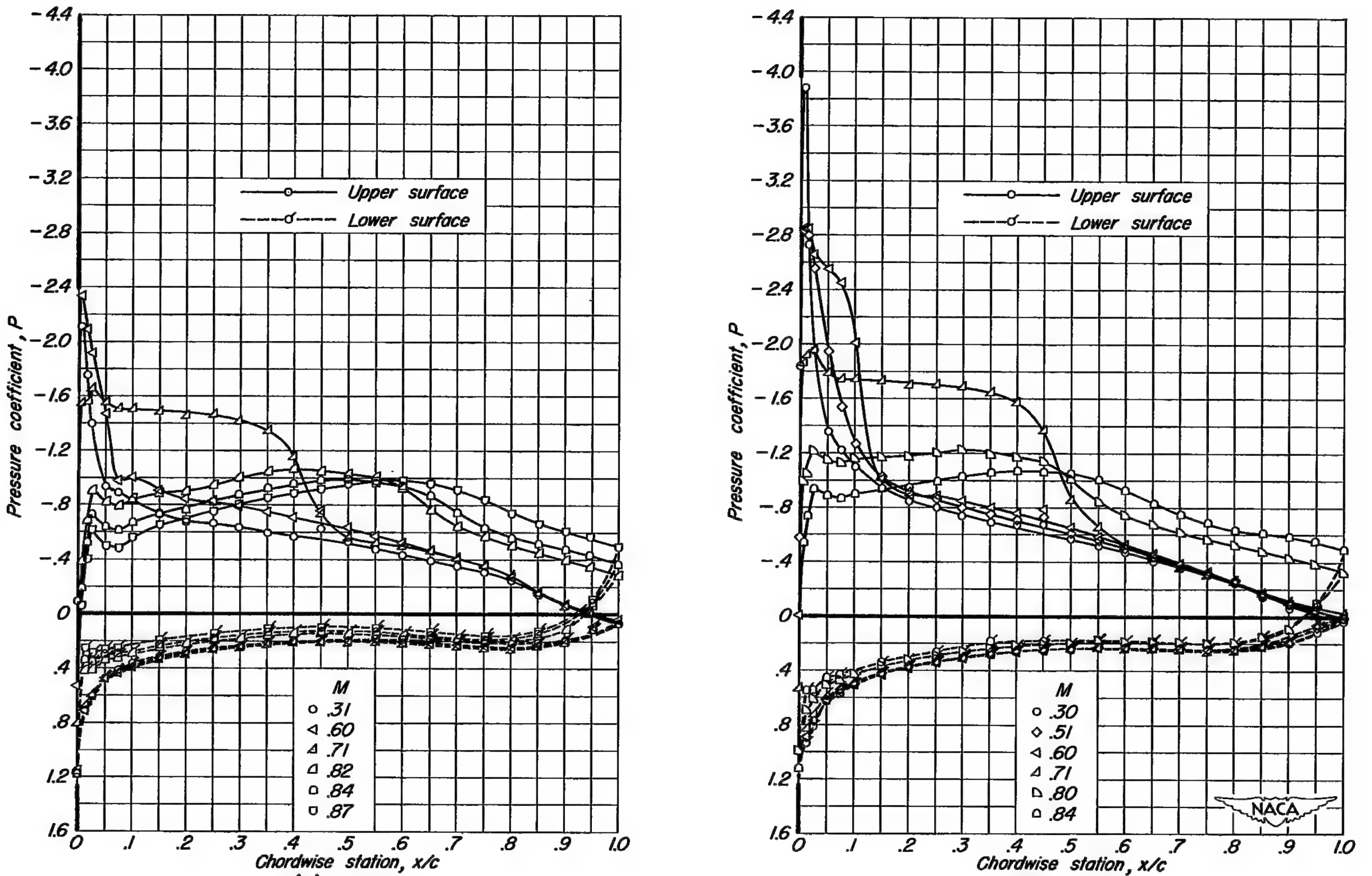


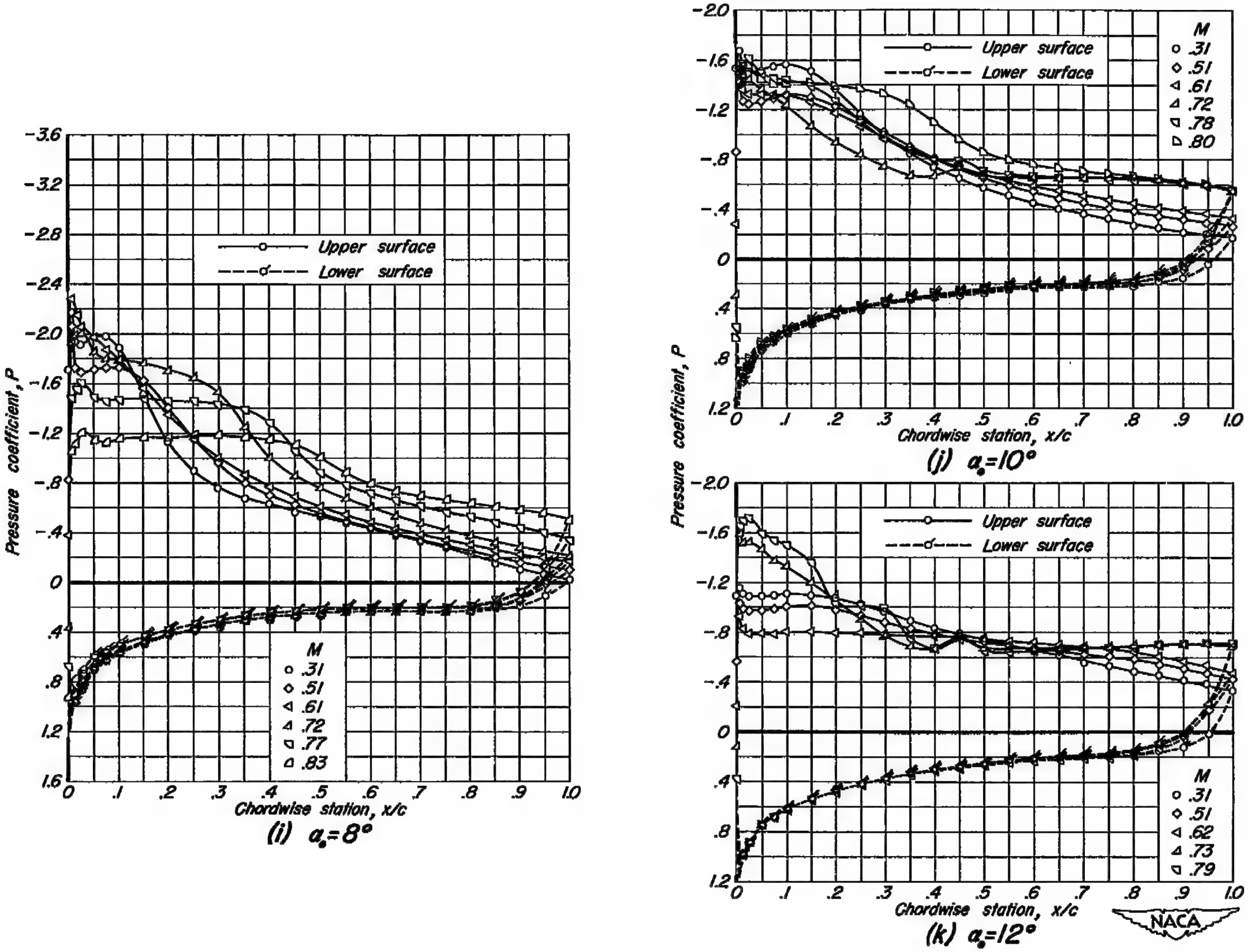
Figure 16.--Continued.



(g) $\alpha_o = 4°$

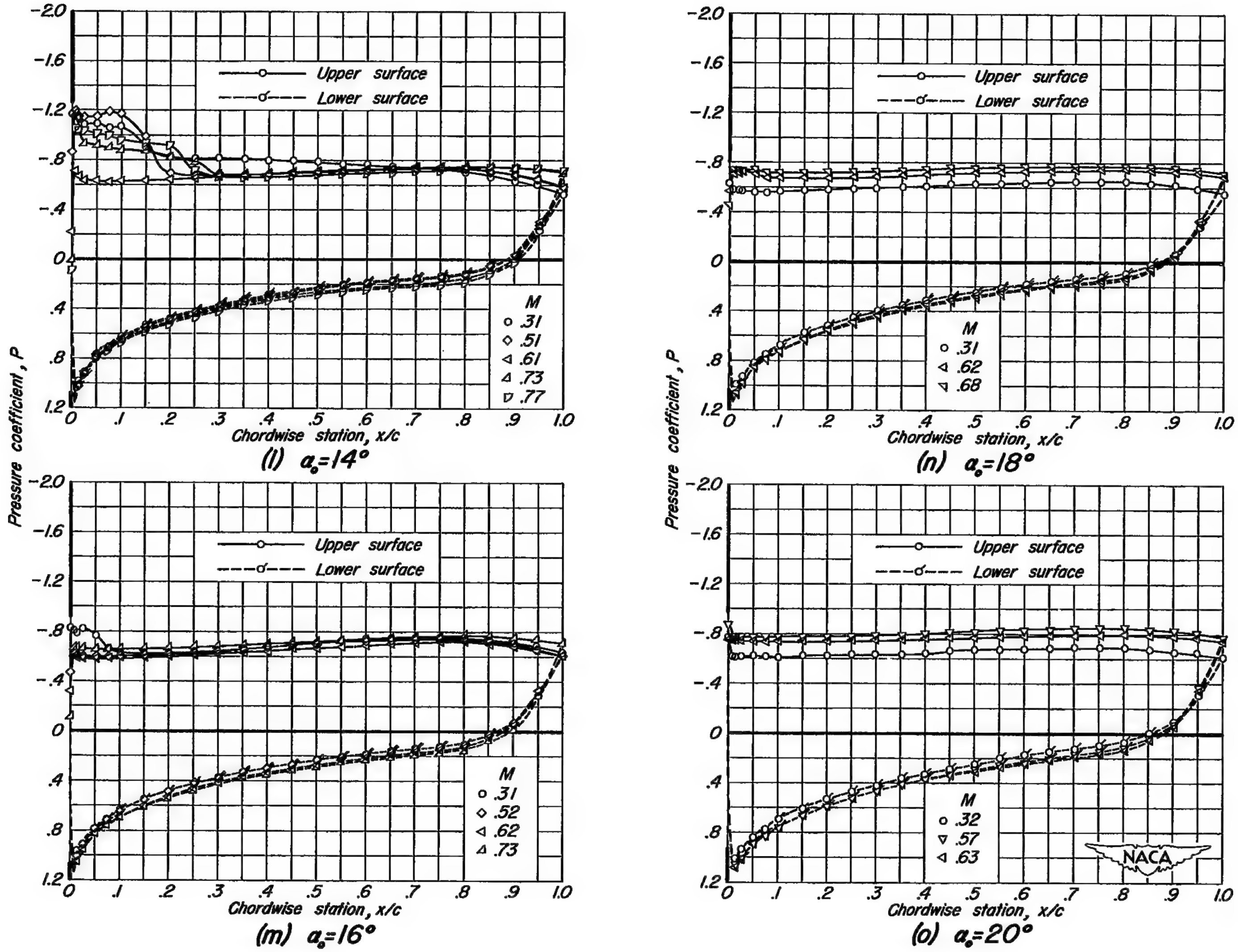
(h) $\alpha_o = 6°$

Figure 16.- Continued.



NACA 64A406

Figure 16.- Continued.



NACA 64A406

Figure 16.- Continued.

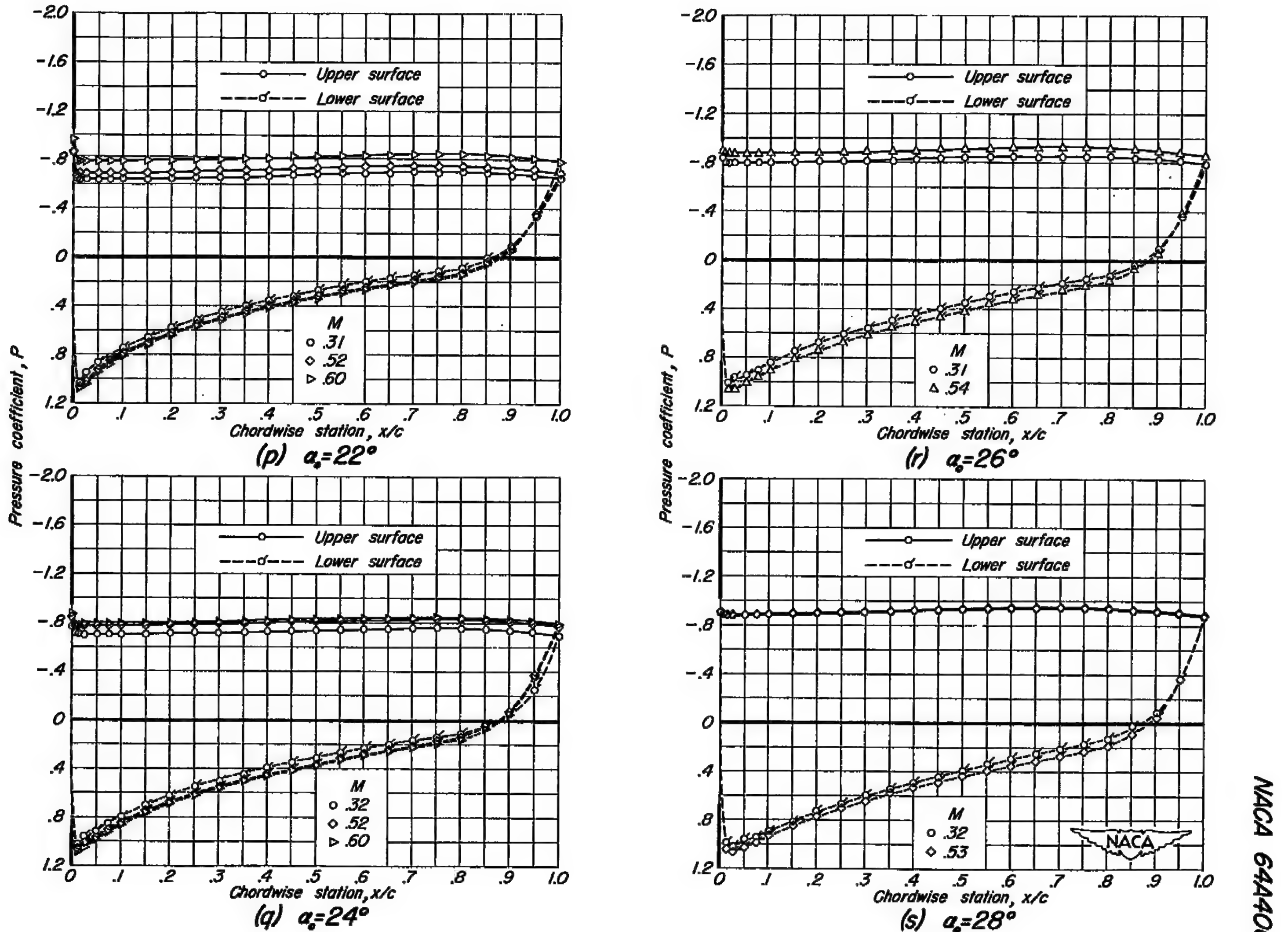


Figure 16.- Concluded.

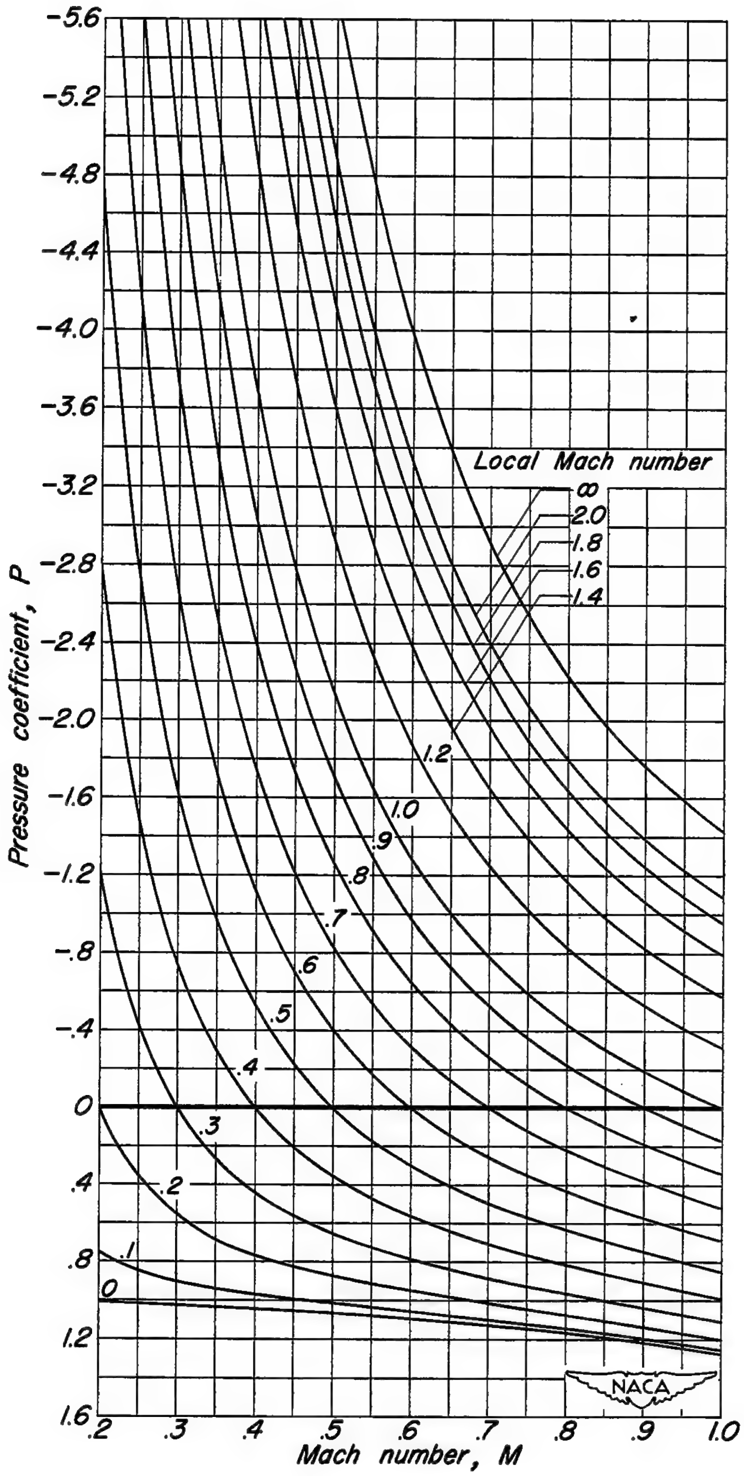
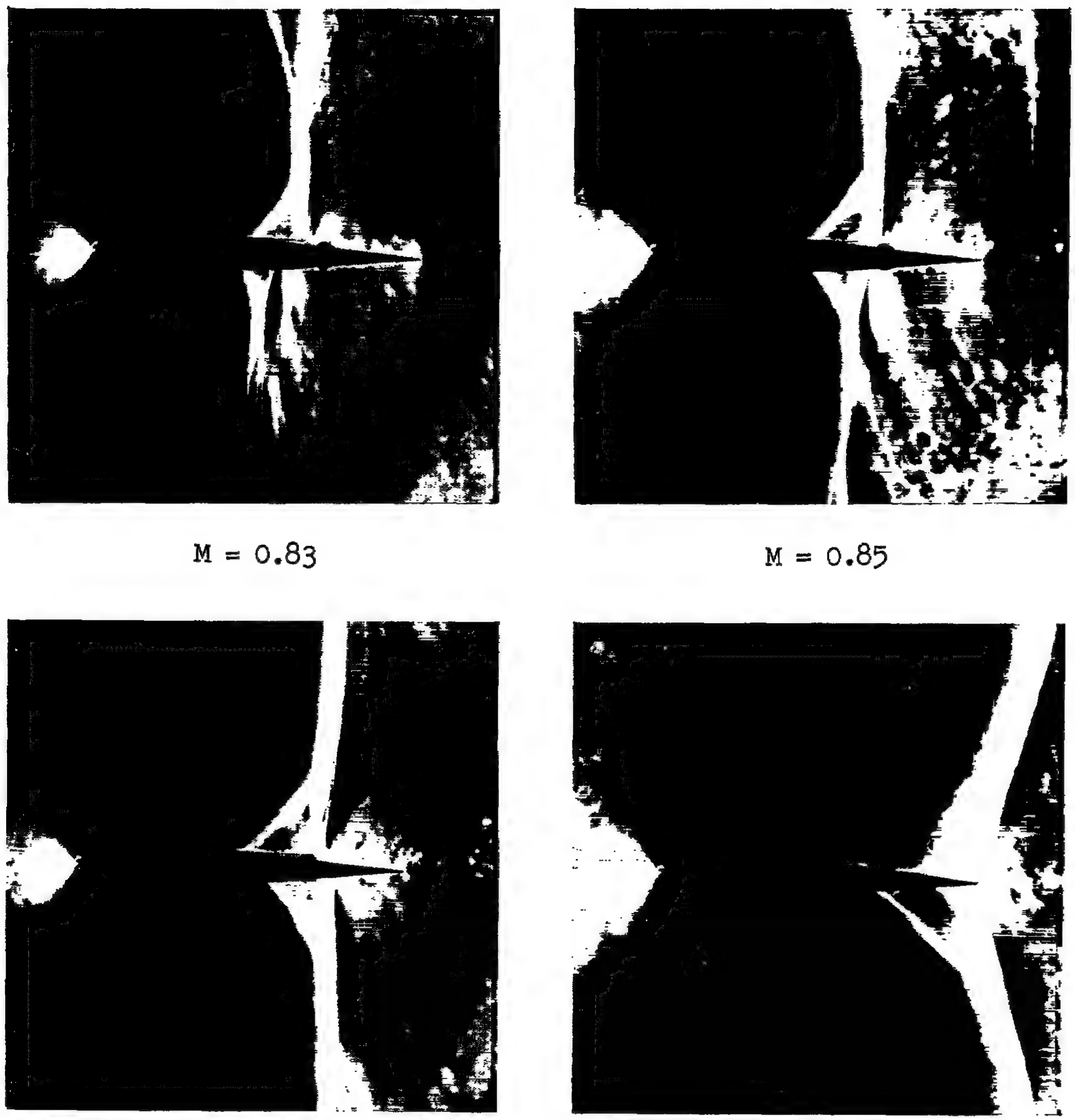


Figure 17.- Effect of free-stream Mach number on local pressure coefficient with local Mach number as a parameter.



M = 0.83

M = 0.85

M = 0.89

A-18538

M = 0.92

(a) $\alpha_o = 1^\circ$

Figure 18.- Schlieren photographs of the flow over the NACA 64A010 airfoil section.

M = 0.86

M = 0.88

(b) $\alpha_o = 2^\circ$

M = 0.86

A-18539

M = 0.89

(c) $\alpha_o = 4^\circ$

Figure 18.- Continued.

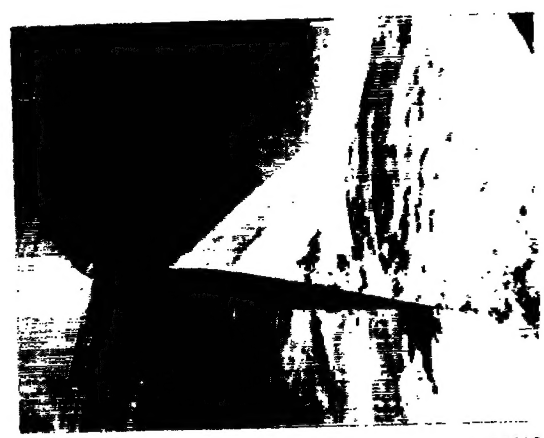
M = 0.63

M = 0.68

M = 0.70

M = 0.77

M = 0.81

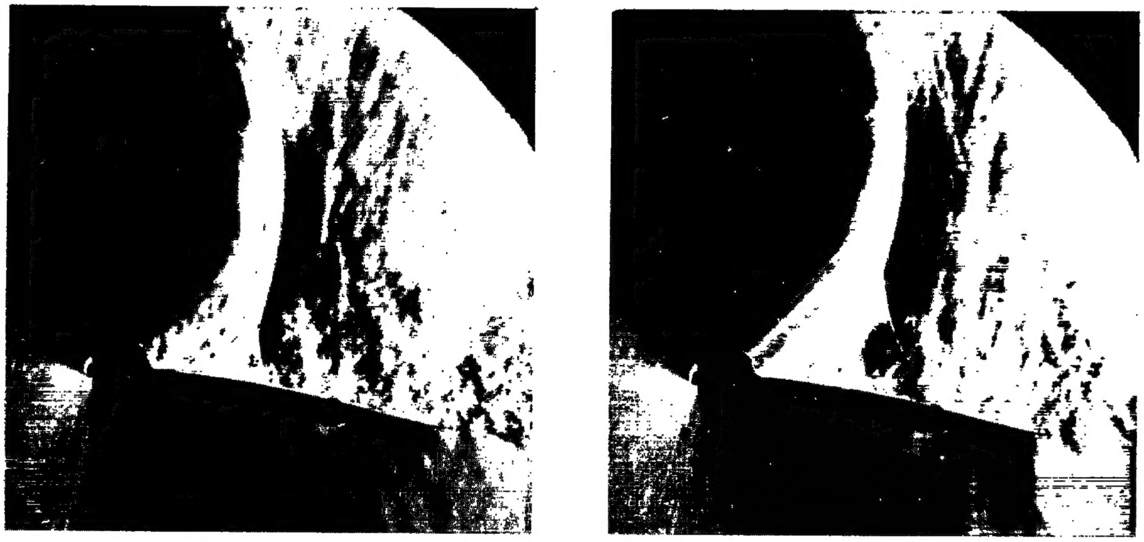


A-18540

M = 0.84

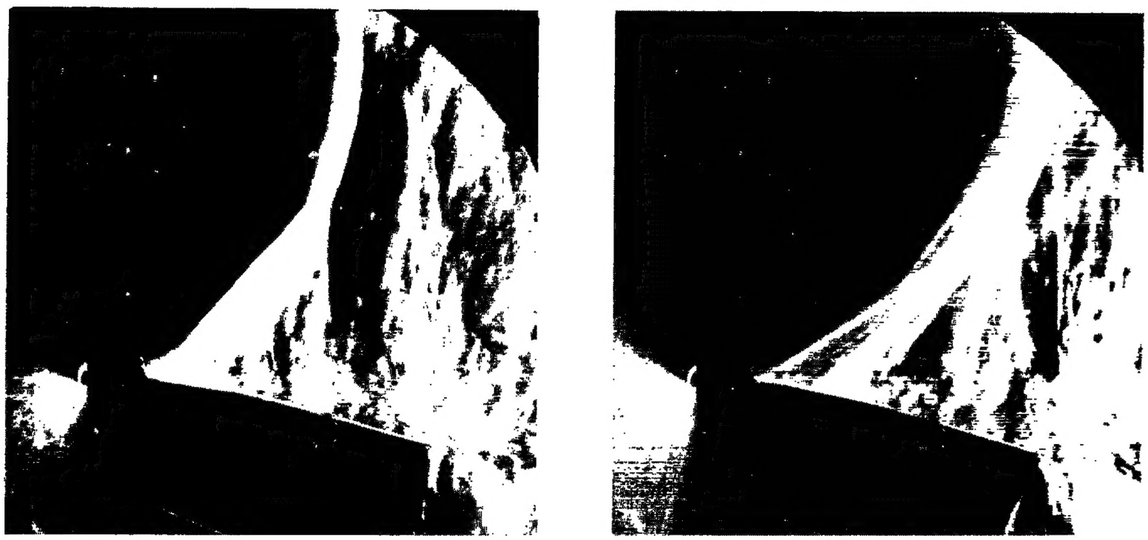
(a) $\alpha_o = 6^\circ$

Figure 18.- Continued



M = 0.79 M = 0.82

(e) $\alpha_o = 8^\circ$



A-18541

M = 0.80 M = 0.82

(f) $\alpha_o = 10^\circ$

Figure 18.- Concluded.

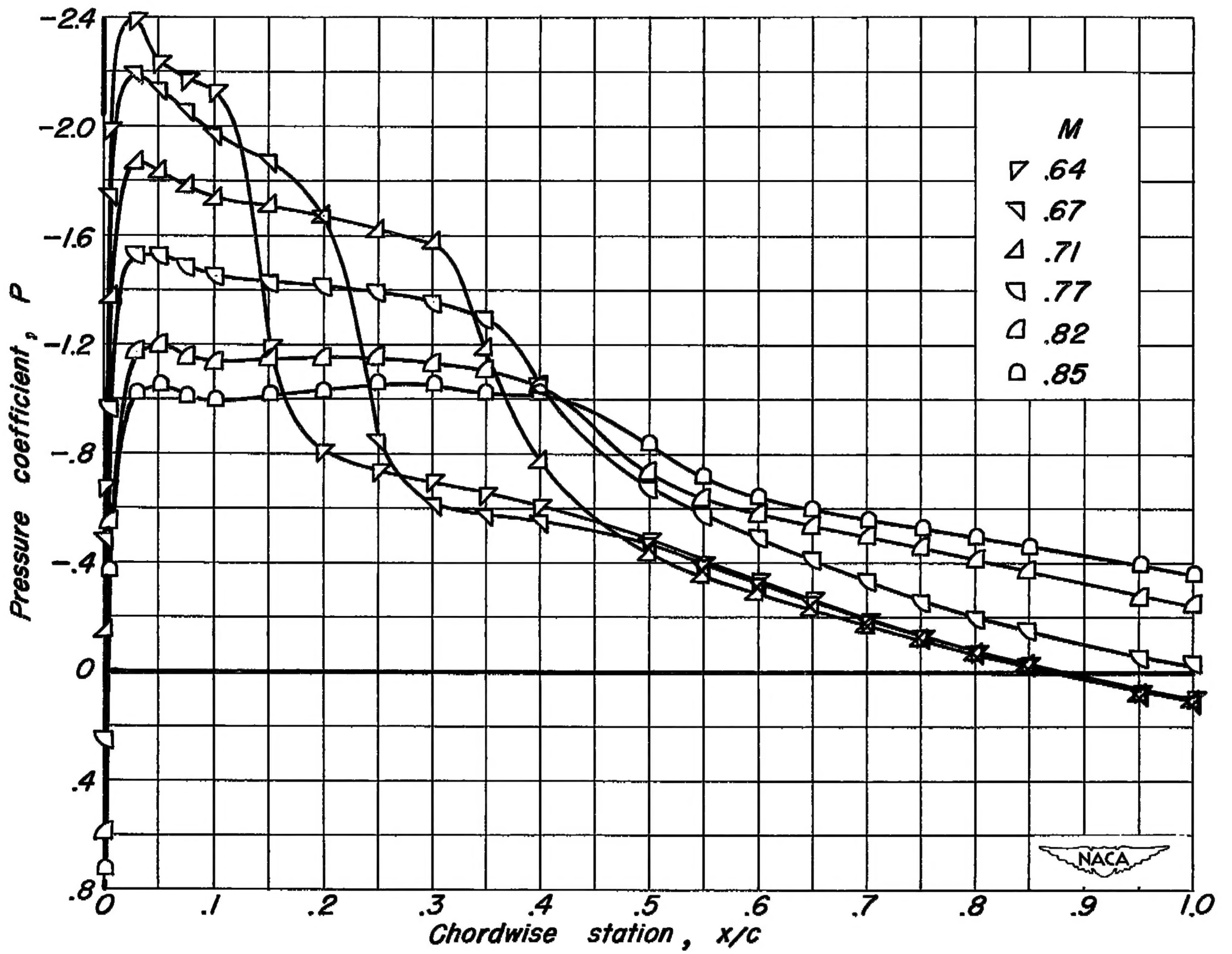


Figure 19.— Variation at selected Mach numbers of the pressure coefficient with chordwise station over the upper surface of the NACA 64A010 airfoil section at an angle of attack of 6.2°.

M = 0.73

M = 0.81

M = 0.87

M = 0.88

A-18542

Figure 20.- Schlieren photographs of the flow over the NACA 64A310, a = 1.0, airfoil section; $\alpha_o = -4^o$.

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